EAST Search History

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	45843	mitsumoto.inv. or nakamura.inv. or (fuji adj photo adj film).as. or (fujifilm adj corporation).as. or (fujifilm adj holdings adj corporation).as.	US-PGPUB; USPAT	OR	OFF	2007/04/16 10:42
L2	2	1 and ((undercoat$4 or interlayer) with ($5polymerizable or $5polymerisable) with ((ethylene adj oxide) or epoxy))	US-PGPUB; USPAT	OR	OFF	2007/04/16 10:44
L3	0	2 and cyanine	US-PGPUB; USPAT	OR	OFF	2007/04/16 10:48
L4	7003	430/271.1.ccls. or 430/275.1.ccls. or 430/276.1.ccls. or 430/277.1. ccls. or 430/278.1.ccls. or 430/279. 1.ccls. or 430/280.1.ccls. or 430/281.1.ccls. or 430/944.ccls. or 430/302.ccls.	US-PGPUB; USPAT	OR	OFF	2007/04/16 10:50
L5	643	4 and (cyanine) and infrared and (($5polymerizable or $5polymerisable) with (compound or monomer))	US-PGPUB; USPAT	OR	OFF	2007/04/16 11:06
L6	580	5 and ($5initiator$1 or (radical with generat$5))	US-PGPUB; USPAT	OR	OFF	2007/04/16 10:51
L7	1800	(undercoat$4 or interlayer or underlayer or (subbing adj layer) or (bottom adj layer) or (bottom adj coating)) with ((ethylene adj oxide) or epoxy)	US-PGPUB; USPAT	OR	OFF	2007/04/16 11:07
L8	44	6 and 7	US-PGPUB; USPAT	OR	OFF	2007/04/16 10:54
L9	63	(cyanine) and infrared and (($5polymerizable or $5polymerisable) with (compound or monomer))	USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2007/04/16 11:07
L10	1295	(undercoat$4 or interlayer or underlayer or (subbing adj layer) or (bottom adj layer) or (bottom adj coating)) with ((ethylene adj oxide) or epoxy)	USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2007/04/16 11:08
L11	0	9 and 10	USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2007/04/16 11:07

EAST Search History

L12	89	(cyanine) and infrared and ($5polymerizable or $5polymerisable)	USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2007/04/16 11:08
L13	0	12 and 10	USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2007/04/16 11:08
L14	62	((undercoat$4 or interlayer or underlayer or (subbing adj layer) or (bottom adj layer) or (bottom adj coating)) same ((ethylene adj oxide) or epoxy)).clm.	US-PGPUB	OR	OFF	2007/04/16 11:09
L15	1	14 and cyanine.clm. and infrared.clm.	US-PGPUB	OR	OFF	2007/04/16 11:09

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

Bib Data Sheet

CONFIRMATION NO. 1240

SERIAL NUMBER	FILING DATE	CLASS	GROUP ART UNIT	ATTORNEY DOCKET NO.
10/809,323	03/26/2004 RULE	430	1752	1110-0318P

APPLICANTS

Tomoyoshi Mitsumoto, Shizuoka, JAPAN;

Ippei Nakamura, Shizuoka, JAPAN;

** CONTINUING DATA **********

None SJL

** FOREIGN APPLICATIONS **********

JAPAN 2003-085166 03/26/2003 SJL
JAPAN 2003-327659 09/19/2003
JAPAN 2003-341197 09/30/2003

IF REQUIRED, FOREIGN FILING LICENSE GRANTED
** 06/08/2004

Foreign Priority claimed	STATE OR COUNTRY	SHEETS DRAWING	TOTAL CLAIMS	INDEPENDENT CLAIMS
☑ yes ☐ no 35 USC 119 (a-d) conditions met ☑ yes ☐ no ☐ Met after Allowance Verified and Acknowledged Examiner's Signature SJL Initials	JAPAN	0	17	2

ADDRESS
02292
BIRCH STEWART KOLASCH & BIRCH
PO BOX 747
FALLS CHURCH , VA
22040-0747

TITLE
Lithographic printing method and presensitized plate

FILING FEE	FEES: Authority has been given in Paper No. _____ to charge/credit DEPOSIT ACCOUNT	☐ All Fees ☐ 1.16 Fees (Filing) ☐ 1.17 Fees (Processing Ext. of time)

#4

Access DB# 221487

SEARCH REQUEST FORM

Scientific and Technical Information Center

Requester's Full Name: Sin J. Lee Examiner #: 7660 Date: 4-4-07

Art Unit: 1752 Phone Number 30 2-1333 Serial Number: 10/809,323

Mail Box and Bldg/Room Location: 9C15 (Rem) Results Format Preferred (circle): ~~PAPER~~ DISK E-MAIL

If more than one search is submitted, please prioritize searches in order of need.

****

Please provide a detailed statement of the search topic, and describe as specifically as possible the subject matter to be searched. Include the elected species or structures, keywords, synonyms, acronyms, and registry numbers, and combine with the concept or utility of the invention. Define any terms that may have a special meaning. Give examples or relevant citations, authors, etc, if known. Please attach a copy of the cover sheet, pertinent claims, and abstract.

Title of Invention: Plz. See B+b.

Inventors (please provide full names): _____

Earliest Priority Filing Date: _____

***For Sequence Searches Only* Please include all pertinent information (parent, child, divisional, or issued patent numbers) along with the appropriate serial number.**

Plz. search for the compound of formula (I) in Cl. #2

****

STAFF USE ONLY

Search Notes

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
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Alexandria, Virginia 22313-1450
www.uspto.gov

Bib Data Sheet

CONFIRMATION NO. 1240

SERIAL NUMBER	FILING DATE	CLASS	GROUP ART UNIT	ATTORNEY DOCKET NO.
10/809,323	03/26/2004 RULE	430	1752	1110-0318P

APPLICANTS

Tomoyoshi Mitsumoto, Shizuoka, JAPAN;

Ippei Nakamura, Shizuoka, JAPAN;

** CONTINUING DATA **********

None SJL

** FOREIGN APPLICATIONS **********

JAPAN 2003-085166 03/26/2003 SJL
JAPAN 2003-327659 09/19/2003
JAPAN 2003-341197 09/30/2003

IF REQUIRED, FOREIGN FILING LICENSE GRANTED
** 06/08/2004

Foreign Priority claimed	STATE OR	SHEETS	TOTAL	INDEPENDENT
35 USC 119 (a-d) conditions met Verified and Acknowledged Examiner's Signature Initials	COUNTRY JAPAN	DRAWING 0	CLAIMS 17	CLAIMS 2

☑ yes ☐ no
☑ yes ☐ no ☐ Met after Allowance SJL

ADDRESS
02292
BIRCH STEWART KOLASCH & BIRCH
PO BOX 747
FALLS CHURCH , VA
22040-0747

TITLE
Lithographic printing method and presensitized plate

FILING FEE	FEES: Authority has been given in Paper No. _____ to charge/credit DEPOSIT ACCOUNT	☐ All Fees ☐ 1.16 Fees (Filing) ☐ 1.17 Fees (Processing Ext. of time)

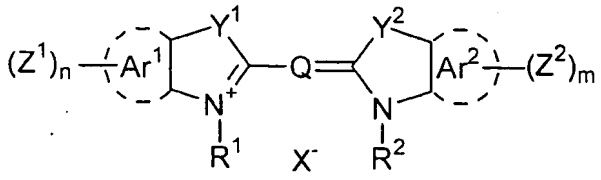
AMENDED CLAIM SET:

1. (previously presented) A presensitized plate comprised of a support having thereon, in order:

an undercoat layer containing a compound having a polymerizable group on the molecule, wherein the compound having a polymerizable group on the molecule also has on the molecule an ethylene oxide group; and

an image recording layer which includes: an infrared absorber (A) that is a cyanine dye having at least one fused ring comprised of a nitrogen-containing heterocycle in combination with an aromatic ring or a second heterocycle, and having on the aromatic ring or second heterocycle an electron-withdrawing group or a heavy atom-containing group, a radical generator (B), and a radical-polymerizable compound (C), and which is removable with printing ink and/or dampening water.

2. (previously presented) The presensitized plate according to claim 1, wherein the infrared absorber (A) is a compound of formula (1) below:

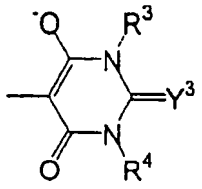


(1)

wherein in the formula (1), R^1 and R^2 are each independently a hydrocarbon group of up to 20 carbons which may be substituted, Ar^1 and Ar^2 are each independently an aromatic hydrocarbon

group or a heterocyclic group which may be substituted, Y^1 and Y^2 are each independently a sulfur atom, an oxygen atom, a selenium atom, a dialkylmethylene group of up to 12 carbons or a -CH=CH- group, Z^1 and Z^2 are each substituents selected from the group consisting of hydrocarbon groups, oxy groups, electron-withdrawing groups and heavy atom-containing groups, at least one of Z^1 and Z^2 being an electron-withdrawing group or a heavy atom-containing group, wherein the letters n and m each represent 0 or a higher integer, with the proviso that the sum of n and m is at least 1,

Q is a pentamethine group or a heptamethine group which may be substituted with a member selected from the group consisting of alkoxy, aryloxy, alkylthio, arylthio, dialkylamino, diarylamino, halogen atoms, alkyl, aralkyl, cycloalkyl, aryl, oxy, iminium bases and substituents of formula (2) below; or may have a cyclohexene, cyclopentene or cyclobutene ring containing three connected methine chains,



(2)

wherein in the formula (2), R^3 and R^4 are each independently a hydrogen atom, an alkyl of 1 to 8 carbons or an aryl of 6 to 10 carbons; and Y^3 is an oxygen atom or a sulfur atom, and

X^- is a counteranion that exists in cases where charge neutralization is required.

3. – 11. (cancelled)

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=> d que l44
L2              8 SEA FILE=REGISTRY ABB=ON  PLU=ON  (110992-87-5/BI OR
                  139361-79-8/BI OR 183745-01-9/BI OR 197087-00-6/BI OR
                  259133-57-8/BI OR 442548-17-6/BI OR 442548-19-8/BI OR
                  869557-67-5/BI)
L3                SCR 2043
L5                SCR 1841 AND 1993 AND 2040
L9                STR

 Hy~~~~G1~~~~Hy        Ak~Cb~Ak        Ak~O~Ak        Ak@10    A@14
  1      2      3        @4   5   @6        @7   8   @9


 Ak~G2~Ak
@11 12 @13


VAR G1=10/4-1 6-3/7-1 9-3/11-1 13-3
REP G2=(1-10) 14
NODE ATTRIBUTES:
NSPEC    IS RC     AT  14
DEFAULT MLEVEL IS ATOM
GGCAT    IS PCY  UNS  AT   1
GGCAT    IS PCY  UNS  AT   3
GGCAT    IS UNS  AT   4
GGCAT    IS UNS  AT   6
GGCAT    IS UNS  AT   7
GGCAT    IS UNS  AT   9
GGCAT    IS UNS  AT  10
GGCAT    IS UNS  AT  11
GGCAT    IS UNS  AT  13
DEFAULT ECLEVEL IS LIMITED
ECOUNT   IS M1 N  M0-X1 O  M0-X1 S  M0-X1 Se  AT   1
ECOUNT   IS M1 N  M0-X1 O  M0-X1 S  M0-X1 Se  AT   3

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS  14

STEREO ATTRIBUTES: NONE
L12           164 SEA FILE=REGISTRY SSS FUL L9 AND L3 AND L5
L17               SCR 1993 AND 2040
L22               STR

Hy~~~~G1~~~~Hy        Ak~Cb~Ak        Ak@10
 1      2      3        @4   5   @6


VAR G1=10/4-1 6-3
NODE ATTRIBUTES:
DEFAULT MLEVEL IS ATOM
GGCAT    IS PCY  UNS  AT   1
GGCAT    IS PCY  UNS  AT   3
DEFAULT ECLEVEL IS LIMITED
ECOUNT   IS M1 N  M0-X1 O  M0-X1 S  M0-X1 Se  AT   1
ECOUNT   IS M1 N  M0-X1 O  M0-X1 S  M0-X1 Se  AT   3
ECOUNT   IS M5 C  AT  10

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS   7
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STEREO ATTRIBUTES: NONE
L25          210 SEA FILE=REGISTRY SSS FUL L22 AND L3 AND L17
L29          259 SEA FILE=REGISTRY ABB=ON  PLU=ON  L12 OR L25
L30           96 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L29
L31           58 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L2
L32          154 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L30 OR L31
L39           49 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L31 AND  (1840-2003)/PRY,A
                 Y,PY
L40          134 SEA FILE=HCAPLUS ABB=ON  PLU=ON  MITSUMOTO, T?/AU
L41         2095 SEA FILE=HCAPLUS ABB=ON  PLU=ON  NAKAMURA, I?/AU
L42            6 SEA FILE=HCAPLUS ABB=ON  PLU=ON  (L40 OR L41) AND L32
L44           43 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L39 NOT L42


=> sel hit rn 1-
E1 THROUGH E6 ASSIGNED

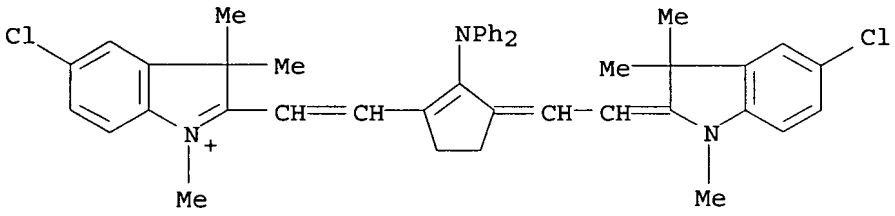
=> d l44 1-43 ibib ed abs hitstr hitind

L44  ANSWER 1 OF 43  HCAPLUS  COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER:         2005:408526  HCAPLUS
DOCUMENT NUMBER:          142:438732
TITLE:                    Lithographic plates showing high sensitivity for
                          direct IR-laser platemaking and good printability
                          and yellow light-resistant photopolymerizable
                          compositions therefor
INVENTOR(S):              Kakino, Ryuki; Kunita, Kazuto; Fujimaki, Kazuhiro
PATENT ASSIGNEE(S):       Fuji Photo Film Co., Ltd., Japan
SOURCE:                   Jpn. Kokai Tokkyo Koho, 86 pp.
                          CODEN: JKXXAF
DOCUMENT TYPE:            Patent
LANGUAGE:                 Japanese
FAMILY ACC. NUM. COUNT:   1
PATENT INFORMATION:

     PATENT NO.           KIND   DATE        APPLICATION NO.         DATE
     ---------------      ----   --------    --------------------    --------
     JP 2005122038         A     20050512    JP 2003-359350          20031020
                                                      <--
PRIORITY APPLN. INFO.:                       JP 2003-359350          20031020
                                                      <--
OTHER SOURCE(S):          MARPAT 142:438732
ED   Entered STN:  13 May 2005
AB   The compns. contain (A) ZYXCR1R2CO2H (R1, R2 = H, monovalent
     substituent; X = O, S, SO2, NR3; R3 = H, monovalent substituent other
     than aromatic; Y = divalent linking group containing no aromatic ring in main
     chain; Z = aromatic) or WXCR1R2CO2H (R1, R2, X = same as above; W = H,
     same as R3), (B) polymerizable compds., (C) radical initiators, and
     optionally (D) IR absorbers.  Also claimed are lithog. plates having
     recording layers of the above compns. on supports.
IT   110992-87-5
        (IR absorbers; yellow light-resistant photopolymerizable compns.
        for lithog. plates with high sensitivity for direct IR-laser
        platemaking and good printability)
RN   110992-87-5  HCAPLUS
CN   3H-Indolium, 5-chloro-2-[2-[3-[(5-chloro-1,3-dihydro-1,3,3-trimethyl-
     2H-indol-2-ylidene)ethylidene]-2-(diphenylamino)-1-cyclopenten-1-
     yl]ethenyl]-1,3,3-trimethyl-, tetrafluoroborate(1-) (9CI)  (CA INDEX
     NAME)
```

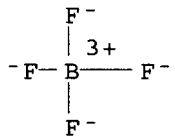
CM 1

CRN 110992-86-4
CMF C43 H42 Cl2 N3



CM 2

CRN 14874-70-5
CMF B F4
CCI CCS



IC ICM G03F007-004
ICS C08F002-44; G03F007-00
CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
Section cross-reference(s): 38
IT 110992-66-0 **110992-87-5**
(IR absorbers; yellow light-resistant photopolymerizable compns. for lithog. plates with high sensitivity for direct IR-laser platemaking and good printability)

L44 ANSWER 2 OF 43 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2005:346225 HCAPLUS
DOCUMENT NUMBER: 142:420084
TITLE: Photopolymerizabe image recording material and manufacture of lithographic printing master plate
INVENTOR(S): Murota, Yasufumi; Goto, Takahiro
PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 38 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2005107388	A	20050421	JP 2003-343372	20031001

PRIORITY APPLN. INFO.: JP 2003-343372 20031001
<--

ED Entered STN: 22 Apr 2005

AB Disclosed is a photopolymerizable image recording material comprising on a support a photopolymerizable layer made from (A) a compound having the maximum absorption in 650-1,300 nm, (B) an aryl radical generating agent, (C) a polymerizable compound, and an O2 blocking layer satisfying $0.2 \leq A \leq 20$ (mL/m2·day) (A = O2 permeability at 25° under 1 atmospheric). The O2 blocking layer may be made from PVA and PVP or a derivative thereof at a ratio $2 \leq PVA/PVP \leq 10$.

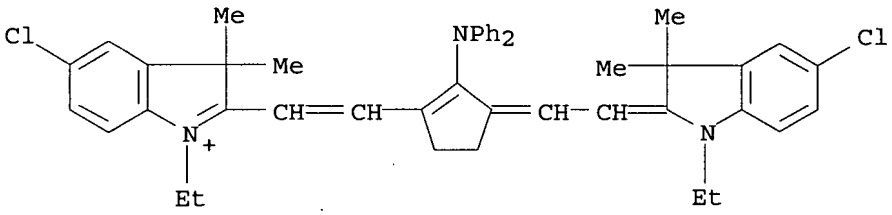
IT **442548-17-6**
(IR absorber; photopolymerizable image recording material for lithog. printing master plate)

RN 442548-17-6 HCAPLUS

CN 3H-Indolium, 5-chloro-2-[2-[3-[(5-chloro-1-ethyl-1,3-dihydro-3,3-dimethyl-2H-indol-2-ylidene)ethylidene]-2-(diphenylamino)-1-cyclopenten-1-yl]ethenyl]-1-ethyl-3,3-dimethyl-, salt with trifluoromethanesulfonic acid (1:1) (9CI) (CA INDEX NAME)

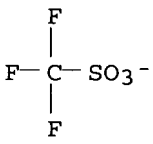
CM 1

CRN 162717-38-6
CMF C45 H46 Cl2 N3



CM 2

CRN 37181-39-8
CMF C F3 O3 S



IC ICM G03F007-11
ICS G03F007-00

CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

IT 183745-11-1 **442548-17-6** 669714-75-4
(IR absorber; photopolymerizable image recording material for lithog. printing master plate)

L44 ANSWER 3 OF 43 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2005:212591 HCAPLUS
DOCUMENT NUMBER: 142:306466

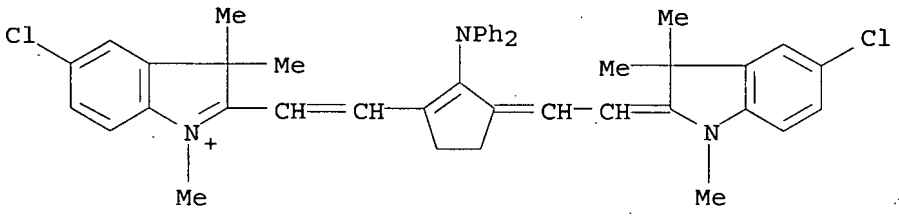
TITLE: Photopolymerizable photoimaging composition and negatively-working directly-imaging lithographic printing plate precursors therefrom
INVENTOR(S): Fujimaki, Kazuhiro
PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 81 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2005062482	A	20050310	JP 2003-292530 <--	20030812
PRIORITY APPLN. INFO.:			JP 2003-292530 <--	20030812

ED Entered STN: 10 Mar 2005
AB The title composition contains a radical polymerization initiator, a radical polymerization co-initiator of ≤1.10 V oxidation potential, an IR-absorber, and radically polymerizable compds. The composition shows high sensitivity and good storageability and provides highly durable layers.
IT **110992-87-5**
(IR-absorber in composition)
RN 110992-87-5 HCAPLUS
CN 3H-Indolium, 5-chloro-2-[2-[3-[(5-chloro-1,3-dihydro-1,3,3-trimethyl-2H-indol-2-ylidene)ethylidene]-2-(diphenylamino)-1-cyclopenten-1-yl]ethenyl]-1,3,3-trimethyl-, tetrafluoroborate(1-) (9CI) (CA INDEX NAME)

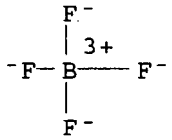
CM 1

CRN 110992-86-4
CMF C43 H42 Cl2 N3



CM 2

CRN 14874-70-5
CMF B F4
CCI CCS



IC ICM G03F007-029
ICS C08F002-44; C08F002-50; G03F007-004; G03F007-00
CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
IT **110992-87-5** 603959-43-9 835902-38-0
(IR-absorber in composition)

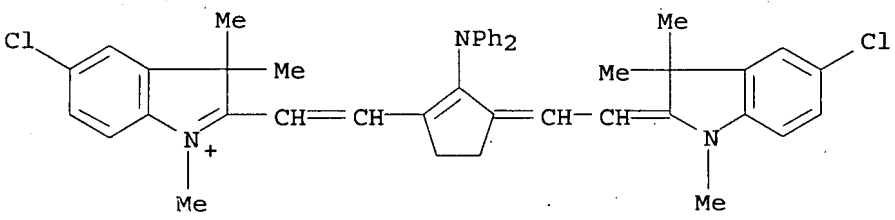
L44 ANSWER 4 OF 43 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2005:209978 HCAPLUS
DOCUMENT NUMBER: 142:306465
TITLE: Photopolymerizable photoimaging composition and negatively-working directly-imaging lithographic printing plate precursors made thereof
INVENTOR(S): Fujimaki, Kazuhiro
PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 81 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2005062478	A	20050310	JP 2003-292453 <--	20030812
PRIORITY APPLN. INFO.:			JP 2003-292453 <--	20030812

ED Entered STN: 10 Mar 2005
AB The title composition contains a compound with an amino groups and hydroxy groups, an IR-absorber, a radical polymerization initiator, and ethylenic unsatd. compds. The composition shows high sensitivity and good storageability and provides highly durable layers.
IT **110992-87-5**
(IR-absorber in composition)
RN 110992-87-5 HCAPLUS
CN 3H-Indolium, 5-chloro-2-[2-[3-[(5-chloro-1,3-dihydro-1,3,3-trimethyl-2H-indol-2-ylidene)ethylidene]-2-(diphenylamino)-1-cyclopenten-1-yl]ethenyl]-1,3,3-trimethyl-, tetrafluoroborate(1-) (9CI) (CA INDEX NAME)

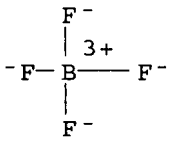
CM 1

CRN 110992-86-4
CMF C43 H42 Cl2 N3



CM 2

CRN 14874-70-5
CMF B F4
CCI CCS



IC ICM G03F007-004
ICS C08F002-44; G03F007-00
CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
IT **110992-87-5** 835902-38-0
(IR-absorber in composition)

L44 ANSWER 5 OF 43 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2005:94035 HCAPLUS
DOCUMENT NUMBER: 142:207647
TITLE: Polymerizable compositions and negatively lithographic printing original plates using them
INVENTOR(S): Fujimaki, Kazuhiro
PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 79 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2005029611	A	20050203	JP 2003-193580 <--	20030708
PRIORITY APPLN. INFO.:			JP 2003-193580 <--	20030708

OTHER SOURCE(S): MARPAT 142:207647
ED Entered STN: 03 Feb 2005
AB The compns. comprise (A) C(:O)AC(:O)OH (A = atom, atomic group) and/or C(CO2H)R1:C[C(:O)Z]R2 (R1, R2 = H, monovalent substituent; R1 and R2 may form ring; Z = OR3, NHR4; R3, R4 = H, monovalent substituent), (B) ethylenically unsatd. bond-containing compds., and (C) IR absorbers. The original plates have recording layers of the compns. The original

plates show high sensitivity, good storage stability, and high alkali developability and give alkali-resistant images by IR radiation.

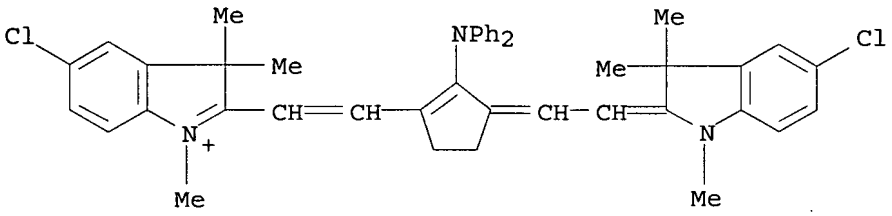
IT **110992-87-5**
(IR absorbers; polymerizable compns. for IR-sensitive lithog. original plates with good alkali developability)

RN 110992-87-5 HCAPLUS

CN 3H-Indolium, 5-chloro-2-[2-[3-[(5-chloro-1,3-dihydro-1,3,3-trimethyl-2H-indol-2-ylidene)ethylidene]-2-(diphenylamino)-1-cyclopenten-1-yl]ethenyl]-1,3,3-trimethyl-, tetrafluoroborate(1-) (9CI) (CA INDEX NAME)

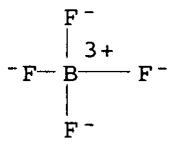
CM 1

CRN 110992-86-4
CMF C43 H42 Cl2 N3



CM 2

CRN 14874-70-5
CMF B F4
CCI CCS



IC ICM C08F002-44
ICS G02B005-20; G03F007-00; G03F007-004; G03H001-02

CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

IT **110992-87-5**
(IR absorbers; polymerizable compns. for IR-sensitive lithog. original plates with good alkali developability)

L44 ANSWER 6 OF 43 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:	2005:93766 HCAPLUS
DOCUMENT NUMBER:	142:207646
TITLE:	Lithographic printing plate precursor and polymerizable composition
INVENTOR(S):	Fujimaki, Kazuhiro
PATENT ASSIGNEE(S):	Fuji Photo Film Co., Ltd., Japan
SOURCE:	Eur. Pat. Appl., 132 pp. CODEN: EPXXDW
DOCUMENT TYPE:	Patent

LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1502735	A2	20050202	EP 2004-18168 <--	20040730
EP 1502735	A3	20050216		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK, HR				
JP 2005049538	A	20050224	JP 2003-204915 <--	20030731
JP 2005048143	A	20050224	JP 2003-284335 <--	20030731
US 2005026075	A1	20050203	US 2004-901326 <--	20040729 → dlk fc D.P.
EP 1685958	A1	20060802	EP 2006-10375 <--	20040730
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK				

PRIORITY APPLN. INFO.:
JP 2003-204915 A 20030731 <--
JP 2003-284335 A 20030731 <--
EP 2004-18168 A3 20040730

ED Entered STN: 03 Feb 2005

AB A polymerizable composition contains: (A) a polyurethane compound soluble or swellable in water or an aqueous alkali solution which is obtained by reacting at least one diol compound having an unsatd. bond in a main chain and having a mol. weight of 500 or more with at least one polyisocyanate compound; (B) a radical initiator; and (C) a photothermal converting agent, and a polymerizable composition containing: (A') a polyurethane resin which is soluble or swellable in water or an aqueous alkali solution and has an unsatd. carbon-carbon bond in its side chain; and (B) a radical initiator, wherein the polyurethane resin (A') is obtained by adding an epoxy compound having an unsatd. carbon-carbon bond to a polyurethane resin having carboxyl group.

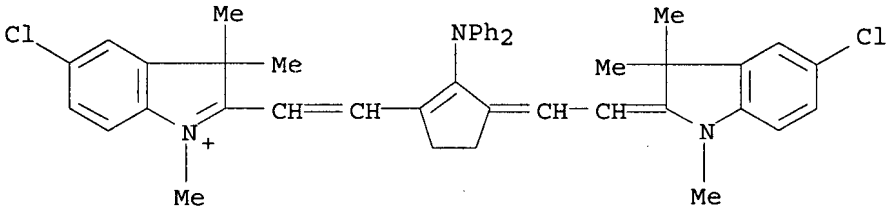
IT **110992-87-5**
(IR absorbing agent; lithog. printing plate precursor and polymerizable composition containing)

RN 110992-87-5 HCAPLUS

CN 3H-Indolium, 5-chloro-2-[2-[3-[(5-chloro-1,3-dihydro-1,3,3-trimethyl-2H-indol-2-ylidene)ethylidene]-2-(diphenylamino)-1-cyclopenten-1-yl]ethenyl]-1,3,3-trimethyl-, tetrafluoroborate(1-) (9CI) (CA INDEX NAME)

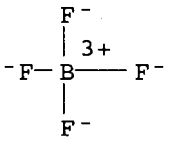
CM 1

CRN 110992-86-4
CMF C43 H42 Cl2 N3



CM 2

CRN 14874-70-5
CMF B F4
CCI CCS



IC ICM B41C001-10
ICS B41M005-36; G03F007-038; G03F007-035; C08G018-68; C08G018-08; C08G018-67
CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
Section cross-reference(s): 35, 38
IT **110992-87-5** 603959-43-9 835902-38-0
(IR absorbing agent; lithog. printing plate precursor and polymerizable composition containing)

L44 ANSWER 7 OF 43 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2004:798784 HCAPLUS
DOCUMENT NUMBER: 141:304324
TITLE: Polymerizable compositions containing certain cyanine dyes with excellent storage stability and IR sensitivity and presensitized lithographic plates using them
INVENTOR(S): Shimada, Kazuto
PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 65 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2004271594	A	20040930	JP 2003-58410 <--	20030305
PRIORITY APPLN. INFO.:			JP 2003-58410 <--	20030305

ED Entered STN: 30 Sep 2004
AB The compns., useful for direct platemaking, contain cyanine dyes (maximum

absorption at 700-1200 nm) with inorg. counter anions, radical generators, and polymerizable unsatd. compds., thus giving images with no fogging.

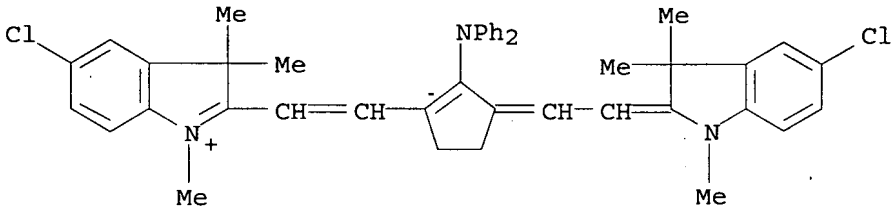
IT **110992-87-5 197087-00-6**
(cyanine dye; polymerizable compns. containing certain cyanine dyes with good storage stability and IR sensitivity for presensitized lithog. plates)

RN 110992-87-5 HCAPLUS

CN 3H-Indolium, 5-chloro-2-[2-[3-[(5-chloro-1,3-dihydro-1,3,3-trimethyl-2H-indol-2-ylidene)ethylidene]-2-(diphenylamino)-1-cyclopenten-1-yl]ethenyl]-1,3,3-trimethyl-, tetrafluoroborate(1-) (9CI) (CA INDEX NAME)

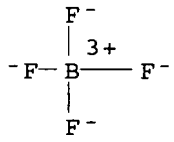
CM 1

CRN 110992-86-4
CMF C43 H42 Cl2 N3



CM 2

CRN 14874-70-5
CMF B F4
CCI CCS

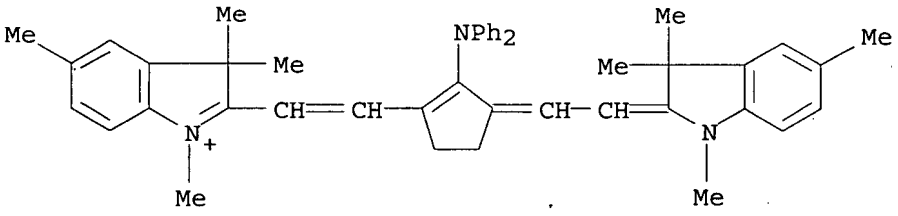


RN 197087-00-6 HCAPLUS

CN 3H-Indolium, 2-[2-[3-[(1,3-dihydro-1,3,3,5-tetramethyl-2H-indol-2-ylidene)ethylidene]-2-(diphenylamino)-1-cyclopenten-1-yl]ethenyl]-1,3,3,5-tetramethyl-, perchlorate (9CI) (CA INDEX NAME)

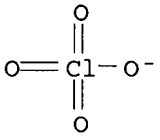
CM 1

CRN 183745-00-8
CMF C45 H48 N3



CM 2

CRN 14797-73-0
CMF Cl O4



IC ICM G03F007-028
ICS C08F002-50; G03F007-00; G03F007-038
CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
Section cross-reference(s): 38
IT **110992-87-5** 183745-11-1 193687-63-7 **197087-00-6**
761305-91-3 761305-98-0 761306-09-6 761306-17-6 761306-27-8
(cyanine dye; polymerizable compns. containing certain cyanine dyes with good storage stability and IR sensitivity for presensitized lithog. plates)

L44 ANSWER 8 OF 43 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2004:741953 HCAPLUS
DOCUMENT NUMBER: 141:251477
TITLE: Negative-working presensitized lithographic plates with good storage stability for direct platemaking
INVENTOR(S): Goto, Takahiro
PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 51 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2004252283	A	20040909	JP 2003-44089 <--	20030221
PRIORITY APPLN. INFO.:			JP 2003-44089 <--	20030221

ED Entered STN: 10 Sep 2004
AB The plates have (a) undercoating layers containing carboxylic acid compds. with Mw ≤3000, (b) photosensitive layers containing IR absorbers, sulfonium salt polymerization catalysts, polymerizable compds., and binder

polymers, and (c) protective layers on supports in this order. The plates show high sensitivity and give lithog. plates with good printing durability.

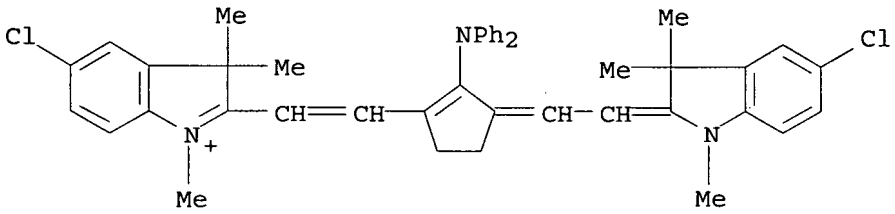
IT **110992-87-5**
(IR absorber; neg.-working presensitized lithog. plates having carboxylic acid compound-containing undercoating layers for direct platemaking)

RN 110992-87-5 HCAPLUS

CN 3H-Indolium, 5-chloro-2-[2-[3-[(5-chloro-1,3-dihydro-1,3,3-trimethyl-2H-indol-2-ylidene)ethylidene]-2-(diphenylamino)-1-cyclopenten-1-yl]ethenyl]-1,3,3-trimethyl-, tetrafluoroborate(1-) (9CI) (CA INDEX NAME)

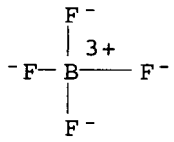
CM 1

CRN 110992-86-4
CMF C43 H42 Cl2 N3



CM 2

CRN 14874-70-5
CMF B F4
CCI CCS



IC ICM G03F007-11
ICS G03F007-00; G03F007-004; G03F007-029; G03F007-033

CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
Section cross-reference(s): 38

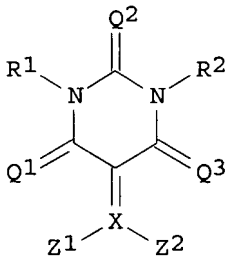
IT **110992-87-5**
(IR absorber; neg.-working presensitized lithog. plates having carboxylic acid compound-containing undercoating layers for direct platemaking)

L44 ANSWER 9 OF 43 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2004:700976 HCAPLUS
DOCUMENT NUMBER: 141:215643
TITLE: Chemically amplified light-sensitive polymerizable composition for lithographic offset printing plate precursors and method for direct image formation

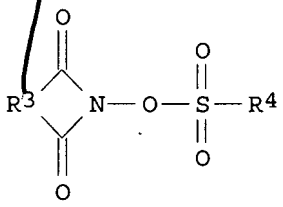
using laser beam and the same
INVENTOR(S): Mizuho, Yuji; Toshimitsu, Eriko
PATENT ASSIGNEE(S): Mitsubishi Chemical Corp., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 27 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2004240120	A	20040826	JP 2003-28515 <--	20030205
PRIORITY APPLN. INFO.:			JP 2003-28515 <--	20030205

OTHER SOURCE(S): MARPAT 141:215643
ED Entered STN: 27 Aug 2004
GI



I

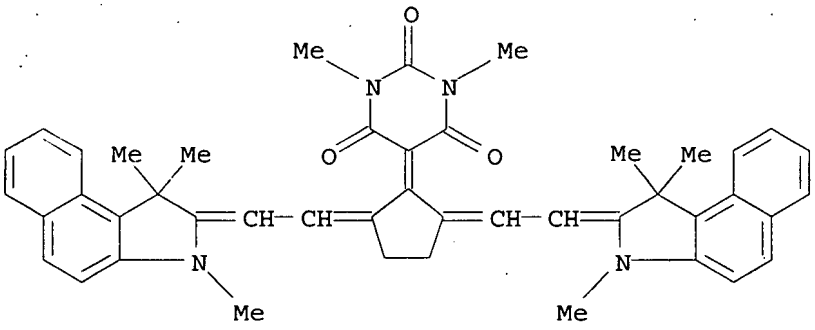


II

AB The title composition contains an alkali-solubilizable resin, an light-absorber, and an acid generator, wherein the light absorber has general structure I(Q1-3 = O, S; R1-2 = H, aliphatic group; aromatic group, heterocyclic group; =X(Z1)(Z2) = substituent showing light-absorption) and wherein the acid generator has general structure II(R3 = arylene, alkylene, alkenylene; R4 = aliphatic group, aromatic group). The composition provides highly laser beam-sensitive printing plate precursors.

IT **259133-57-8**
(light absorber in chemical amplified light-sensitive polymerizable composition)

RN 259133-57-8 HCAPLUS
CN 2,4,6(1H,3H,5H)-Pyrimidinetrione, 5-[2,5-bis[(1,3-dihydro-1,1,3-trimethyl-2H-benz[e]indol-2-ylidene)ethylidene]cyclopentylidene]-1,3-dimethyl- (9CI) (CA INDEX NAME)

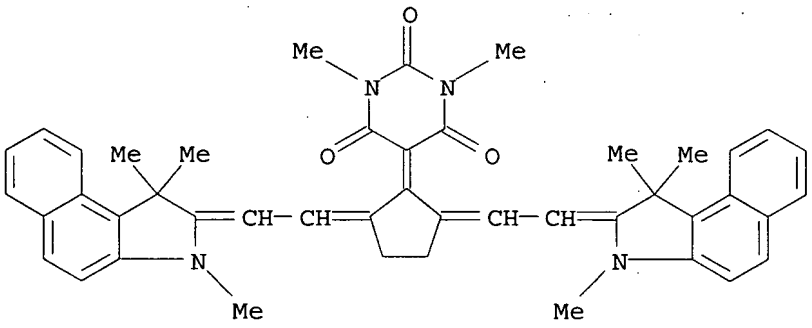


IC ICM G03F007-031
ICS G03F007-038; G03F007-039; H01L021-027
CC 74-5 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
IT 5551-72-4 85342-62-7 **259133-57-8** 394211-02-0 744221-44-1
(light absorber in chemical amplified light-sensitive polymerizable composition)

L44 ANSWER 10 OF 43 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2004:605648 HCAPLUS
DOCUMENT NUMBER: 141:148133
TITLE: Wear-resistant lithographic original plates, printing process therewith, and UV-absorbing microcapsules therefor
INVENTOR(S): Hiraoka, Saburo
PATENT ASSIGNEE(S): Konica Minolta Holdings, Inc., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 19 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2004209704	A	20040729	JP 2002-379549 <--	20021227
PRIORITY APPLN. INFO.:			JP 2002-379549 <--	20021227

ED Entered STN: 29 Jul 2004
AB The plates have, on hydrophilic supports, lipophilic hot-melt substances or hydrophobic substance precursors (having thermal crosslinking groups) encapsulated in UV absorber-containing microcapsule walls. The microcapsules may contain IR-absorbing photothermal converters. Printing process employing (dampening) water and/or inks and no alkali developers in (on-press) platemaking of the plates is also claimed.
IT **259133-57-8**
(S 0325, photothermal converters; PS plates containing UV-absorbing microcapsules and showing long shelf life under light)
RN 259133-57-8 HCAPLUS
CN 2,4,6(1H,3H,5H)-Pyrimidinetrione, 5-[2,5-bis[(1,3-dihydro-1,1,3-trimethyl-2H-benz[e]indol-2-ylidene)ethylidene]cyclopentylidene]-1,3-dimethyl- (9CI) (CA INDEX NAME)

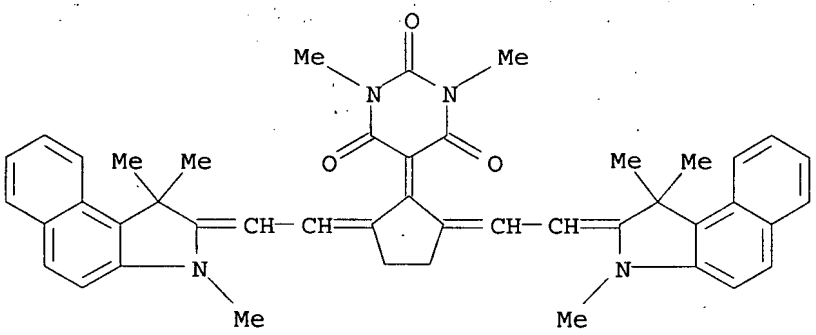


IC ICM B41N001-14
ICS G03F007-00; G03F007-004
CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
Section cross-reference(s): 38
IT **259133-57-8**
(S 0325, photothermal converters; PS plates containing UV-absorbing microcapsules and showing long shelf life under light)

L44 ANSWER 11 OF 43 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2004:412025 HCAPLUS
DOCUMENT NUMBER: 140:431393
TITLE: Photoimaging compositions and high-resolution pattern formation therefrom by stereophotolithography
INVENTOR(S): Urano, Toshiyoshi
PATENT ASSIGNEE(S): Mitsubishi Chemical Corp., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 43 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2004144869	A	20040520	JP 2002-307851 <--	20021023
PRIORITY APPLN. INFO.:			JP 2002-307851 <--	20021023

ED Entered STN: 21 May 2004
AB The compns., comprising (A) laser-sensitive photothermal conversion substances and (B) photosensitive components, are patterned (for shaping or recording) by 3-dimensional scanning exposure to lasers with 350-1300 nm wavelength at light intensity ≥9.5 + 103 W/cm2.
IT **259133-57-8**
(photothermal conversion substances; high-resolution stereolithog. with photothermal converter-containing photoimaging resin compns.)
RN 259133-57-8 HCAPLUS
CN 2,4,6(1H,3H,5H)-Pyrimidinetrione, 5-[2,5-bis[(1,3-dihydro-1,1,3-trimethyl-2H-benz[e]indol-2-ylidene)ethylidene]cyclopentylidene]-1,3-dimethyl- (9CI) (CA INDEX NAME)



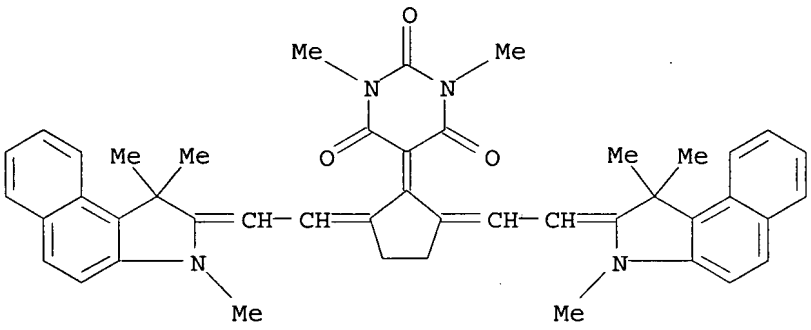
IC ICM G03F007-029
ICS B29C067-00; C08F002-50; G03F007-004; G03F007-20
CC 74-4 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
Section cross-reference(s): 38
IT **259133-57-8** 328063-81-6
(photothermal conversion substances; high-resolution stereolithog. with photothermal converter-containing photoimaging resin compns.)

L44 ANSWER 12 OF 43 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2004:330804 HCAPLUS
DOCUMENT NUMBER: 140:347592
TITLE: Negative-working lithographic printing master plate having photosensitive layer with specific near-IR absorptivity
INVENTOR(S): Murota, Yasufumi
PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 27 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2004126031	A	20040422	JP 2002-287615 <--	20020930
PRIORITY APPLN. INFO.:			JP 2002-287615 <--	20020930

ED Entered STN: 23 Apr 2004
AB The neg.-working lithog. printing master plate comprises a photosensitive layer on a support containing (1) an ethylenic unsatd. compound, (2) a dye having the maximum absorption in 500-700 nm, (3) a cyanine and/or phthalocyanine sensitizing dye which has a heterocyclyl bonded via a polymethine chain and has the maximum absorption in 700-900 nm, and (4) a radical generating agent, wherein the absorptivity of the photosensitive layer satisfies the following conditions: (a) the absorptivity (ODx) of the dye at the maximum absorption wavelength is $0.4<ODx<2.0$ and (b) the absorptivity (ODy) of the sensitizing dye at the maximum absorption wavelength is $0.2<ODy<2.0$. The neg.-working lithog. printing master plate exhibited high sensitivity toward near-IR light.
IT **259133-57-8 442548-17-6**
(sensitizing dye; neg.-working lithog. printing master plate having photosensitive layer with specific near-IR absorptivity)

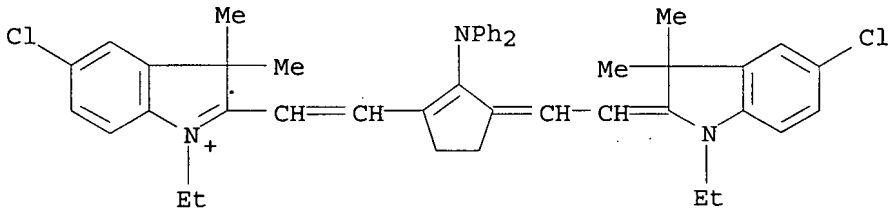
RN 259133-57-8 HCAPLUS
CN 2,4,6(1H,3H,5H)-Pyrimidinetrione, 5-[2,5-bis[(1,3-dihydro-1,1,3-trimethyl-2H-benz[e]indol-2-ylidene)ethylidene]cyclopentylidene]-1,3-dimethyl- (9CI) (CA INDEX NAME)



RN 442548-17-6 HCAPLUS
CN 3H-Indolium, 5-chloro-2-[2-[3-[(5-chloro-1-ethyl-1,3-dihydro-3,3-dimethyl-2H-indol-2-ylidene)ethylidene]-2-(diphenylamino)-1-cyclopenten-1-yl]ethenyl]-1-ethyl-3,3-dimethyl-, salt with trifluoromethanesulfonic acid (1:1) (9CI) (CA INDEX NAME)

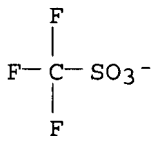
CM 1

CRN 162717-38-6
CMF C45 H46 Cl2 N3



CM 2

CRN 37181-39-8
CMF C F3 O3 S



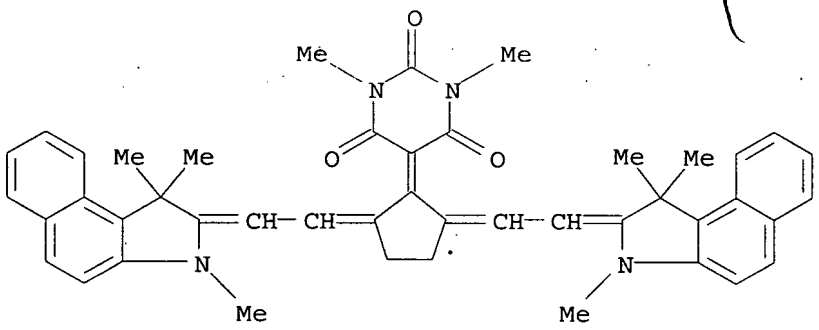
IC ICM G03F007-004
ICS G03F007-00
CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
Section cross-reference(s): 41

IT **259133-57-8 442548-17-6** 681127-09-3
(sensitizing dye; neg.-working lithog. printing master plate having photosensitive layer with specific near-IR absorptivity)

L44 ANSWER 13 OF 43 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2004:139744 HCAPLUS
DOCUMENT NUMBER: 140:190028
TITLE: Negative-working photoimaging compositions, presensitized lithographic plates, and photolithography thereon
INVENTOR(S): Urano, Toshiyoshi; Masuda, Tetsuya
PATENT ASSIGNEE(S): Mitsubishi Chemical Corp., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 34 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2004054107	A	20040219	JP 2002-213972 <--	20020723
PRIORITY APPLN. INFO.:			JP 2002-213972 <--	20020723

ED Entered STN: 20 Feb 2004
AB Compns. of (A) three-dimensionally crosslinkable components, (B) photothermal conversion agents, and (C) epoxy-bearing compds. are applied on supports, scanned by 350-1300-nm laser light (at ≥9.5 + 103 W/cm2), and developed to give PS plates with good interlayer adhesion of the printing face and the supports. The compns. show excellent safelight property while having high sensitivity to IR-UV light.
IT **259133-57-8**
(photothermal converters; neg. photoimaging compns. containing epoxy-bearing components for PS plates with good interlayer adhesion)
RN 259133-57-8 HCAPLUS
CN 2,4,6(1H,3H,5H)-Pyrimidinetrione, 5-[2,5-bis[(1,3-dihydro-1,1,3-trimethyl-2H-benz[e]indol-2-ylidene)ethylidene]cyclopentylidene]-1,3-dimethyl- (9CI) (CA INDEX NAME)



IC ICM G03F007-038
ICS C08F002-44; C08F291-10; G03F007-004
CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

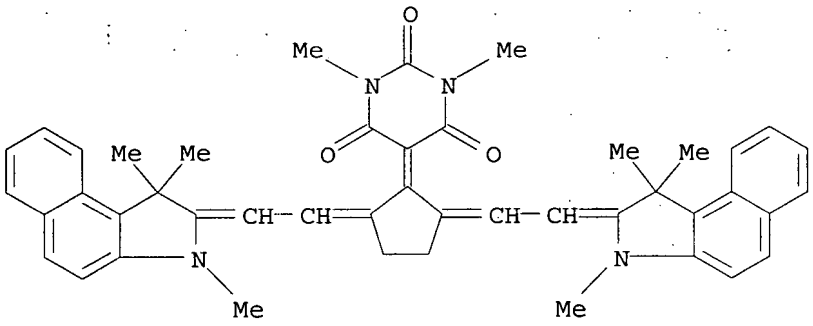
Section cross-reference(s): 38

IT 212964-63-1 **259133-57-8** 328063-81-6
(photothermal converters; neg. photoimaging compns. containing epoxy-bearing components for PS plates with good interlayer adhesion)

L44 ANSWER 14 OF 43 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2004:139743 HCAPLUS
DOCUMENT NUMBER: 140:190027
TITLE: IR-sensitive positive photoimaging compositions, presensitized lithographic plates, and photoimaging thereon
INVENTOR(S): Urano, Toshiyoshi; Mizuho, Yuji; Toshimitsu, Eriko
PATENT ASSIGNEE(S): Mitsubishi Chemical Corp., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 29 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2004054106	A	20040219	JP 2002-213971 <--	20020723
PRIORITY APPLN. INFO.:			JP 2002-213971 <--	20020723

OTHER SOURCE(S): MARPAT 140:190027
ED Entered STN: 20 Feb 2004
AB Compns. containing photothermal conversion agents, alkali-soluble resins having acid-labile groups, and water-insol. and alkali-soluble photoacid generators are applied on supports, scanned with 650-1300-nm laser light (for ≥9.5 + 10³ W/cm2), and alkali developed to form lithog. plates having printing face with good adhesion to the supports. The resins may be poly(vinyl phenols) or novolaks.
IT **259133-57-8**
(photothermal converters; IR-sensitive pos. photoimaging compns. containing water-insol. photoacid generators for PS plates)
RN 259133-57-8 HCAPLUS
CN 2,4,6(1H,3H,5H)-Pyrimidinetrione, 5-[2,5-bis[(1,3-dihydro-1,1,3-trimethyl-2H-benz[e]indol-2-ylidene)ethylidene]cyclopentylidene]-1,3-dimethyl- (9CI) (CA INDEX NAME)



IC ICM G03F007-004
ICS G03F007-032; G03F007-039
CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other

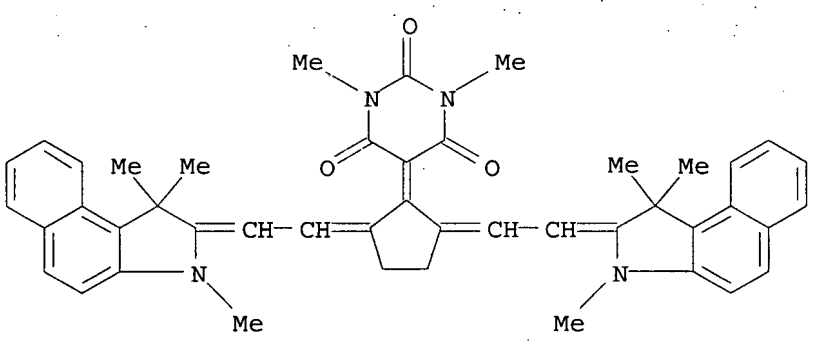
Reprographic Processes)
Section cross-reference(s): 38
IT 212964-63-1 **259133-57-8**
(photothermal converters; IR-sensitive pos. photoimaging compns. containing water-insol. photoacid generators for PS plates)

L44 ANSWER 15 OF 43 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2003:870481 HCAPLUS
DOCUMENT NUMBER: 139:356044
TITLE: Radiation-sensitive mixture and recording material using this mixture
INVENTOR(S): Gries, Willi Kurt
PATENT ASSIGNEE(S): AGFA-Gevaert, Belg.
SOURCE: Eur. Pat. Appl., 18 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1359008	A1	20031105	EP 2002-100424 <--	20020429
EP 1359008	B1	20050831		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
US 2003215744	A1	20031120	US 2003-425158 <--	20030429
JP 2003344997	A	20031203	JP 2003-125528 <--	20030430
PRIORITY APPLN. INFO.:			EP 2002-100424 A <--	20020429
			US 2002-390988P P <--	20020624

→ CNK for undercoat layer.

OTHER SOURCE(S): MARPAT 139:356044
ED Entered STN: 06 Nov 2003
AB The invention relates to a radiation-sensitive mixture comprising a radical polymerizable acrylate- or methacrylate-monomer and/or oligomer with at least two acrylate- and/or methacrylate-groups and at least one photooxidizable group, one photoinitiator, one IR-absorbing dye and one organic polymer binder, wherein the IR-absorbing dye is heptamethyl cyanine dye. The invention further relates to a recording material with a support and a photopolymerizable layer as well as a method for manufacturing a printing plate using the recording material. The recording material shows excellent light sensitivity.
IT **259133-57-8**
(IR dye in photopolymerizable recording mixture suitable for manufacturing offset lithog. printing plate)
RN 259133-57-8 HCAPLUS
CN 2,4,6(1H,3H,5H)-Pyrimidinetrione, 5-[2,5-bis[(1,3-dihydro-1,1,3-trimethyl-2H-benz[e]indol-2-ylidene)ethylidene]cyclopentylidene]-1,3-dimethyl- (9CI) (CA INDEX NAME)



IC ICM B41C001-10
ICS B41M005-36; B41M005-40; C09B055-00
CC 74-4 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
Section cross-reference(s): 38
IT 134127-48-3 **259133-57-8** 328063-81-6 328063-88-3
618437-50-6 618437-51-7
(IR dye in photopolymerizable recording mixture suitable for manufacturing offset lithog. printing plate)
REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L44 ANSWER 16 OF 43 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2003:723567 HCAPLUS
DOCUMENT NUMBER: 139:237767
TITLE: Manufacture of negatively lithographic printing original plates
INVENTOR(S): Aoshima, Keitaro
PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 24 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

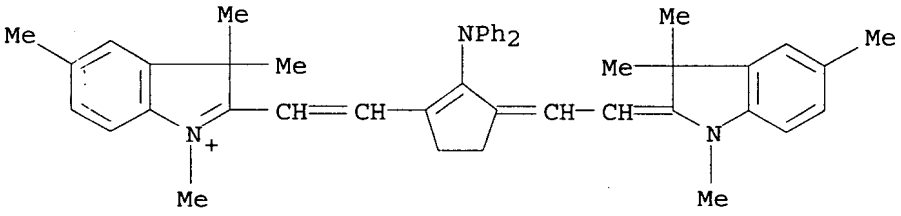
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2003260881	A	20030916	JP 2002-62219 <--	20020307
PRIORITY APPLN. INFO.:			JP 2002-62219 <--	20020307

ED Entered STN: 16 Sep 2003
AB In manufacture of the plates by formation of recording layers giving hydrophobic regions by exposure to IR laser light, the plates are cut by using cutting slitters having interval of upper edges and lower edges 0-30 μm. The plates show good crack resistance in cutting and no stains at edge parts.
IT **197087-00-6**
(IR absorbers in recording layers; cutting in manufacture of IR laser-sensitive neg. lithog. original plates with good edge-stain resistance)
RN 197087-00-6 HCAPLUS
CN 3H-Indolium, 2-[2-[3-[(1,3-dihydro-1,3,3,5-tetramethyl-2H-indol-2-ylidene)ethylidene]-2-(diphenylamino)-1-cyclopenten-1-yl]ethenyl]-

1,3,3,5-tetramethyl-, perchlorate (9CI) (CA INDEX NAME)

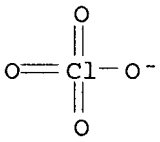
CM 1

CRN 183745-00-8
CMF C45 H48 N3



CM 2

CRN 14797-73-0
CMF Cl O4



IC ICM B41N001-08
ICS B23D019-06; G03F007-00
CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
IT 134127-48-3 182749-66-2 **197087-00-6** 221661-30-9
(IR absorbers in recording layers; cutting in manufacture of IR laser-sensitive neg. lithog. original plates with good edge-stain resistance)

L44 ANSWER 17 OF 43 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2003:353722 HCAPLUS
DOCUMENT NUMBER: 138:360441
TITLE: Presensitized negative lithographic original plates and heat-sensitive radical generator compositions therefor
INVENTOR(S): Shimada, Kazuto; Sorori, Tadahiro
PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 36 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

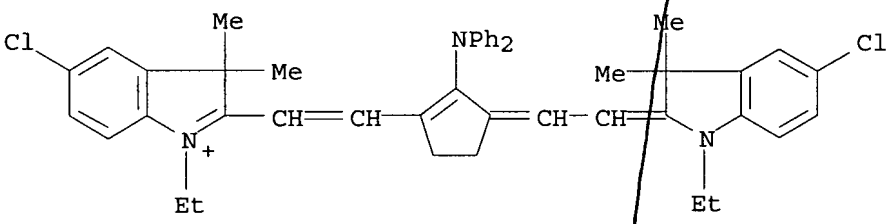
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2003131360	A	20030509	JP 2001-329129 <--	20011026

PRIORITY APPLN. INFO.: JP 2001-329129 20011026
<--

OTHER SOURCE(S): MARPAT 138:360441
ED Entered STN: 09 May 2003
AB The plates have photothermal conversion layers containing heat-sensitive radical generators RSO2S-M+ [R = alk(en)yl, aryl, aralkyl, alkynyl; M+ = sulfonium, diazonium, iodonium, azinium], compds. which change chemical or phys. properties irreversibly upon reaction with radicals, and binder polymers.
IT **442548-17-6**
(photothermal converters; high-sensitive photopolymerizable compns. containing sp. onium-type radical generators for PS plates)
RN 442548-17-6 HCAPLUS
CN 3H-Indolium, 5-chloro-2-[2-[3-[(5-chloro-1-ethyl-1,3-dihydro-3,3-dimethyl-2H-indol-2-ylidene)ethylidene]-2-(diphenylamino)-1-cyclopenten-1-yl]ethenyl]-1-ethyl-3,3-dimethyl-, salt with trifluoromethanesulfonic acid (1:1) (9CI) (CA INDEX NAME)

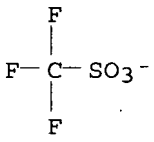
CM 1

CRN 162717-38-6
CMF C45 H46 Cl2 N3



CM 2

CRN 37181-39-8
CMF C F3 O3 S



IC ICM G03F007-00
ICS B41N001-14; G03F007-004; G03F007-028
CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
Section cross-reference(s): 38
IT 134127-48-3 351195-63-6 **442548-17-6**
(photothermal converters; high-sensitive photopolymerizable compns. containing sp. onium-type radical generators for PS plates)

L44 ANSWER 18 OF 43 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2003:353716 HCAPLUS
DOCUMENT NUMBER: 138:346431

TITLE: Heat-developable photographic materials with backing layers for easy conveying
INVENTOR(S): Kubo, Toshiaki
PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 35 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2003131341	A	20030509	JP 2001-324431 <--	20011023
PRIORITY APPLN. INFO.:			JP 2001-324431 <--	20011023

ED Entered STN: 09 May 2003

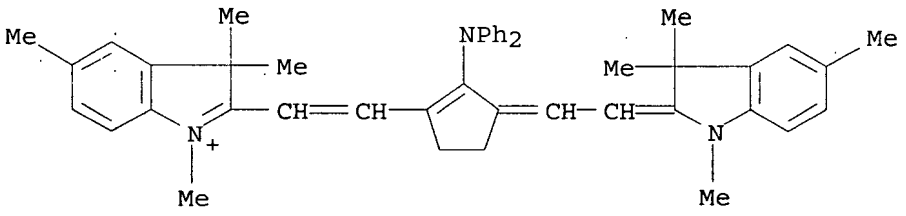
AB The outermost backing layer, formed on the photog. film, (A) shows surface energy of 10-70 J/m2 after heat development or (B) shows post heat-development surface energy difference of ≤30 J/m2 with the tape which is adhered onto the backing layer on conveying of the film. Method for treatment of the films by exposure at 750-800 nm and reading of information (e.g. register marks) at 600-700 nm is also claimed. Also claimed is development of the films with a heat developer equipped with upper and lower heaters and with conveying rollers only on the image-forming side of the film.

IT **183745-01-9**
(dye, outermost backing layer comprising; heat-developable photog. films with certain surface energy on their outermost backing layer for easy conveying)

RN 183745-01-9 HCAPLUS
CN 3H-Indolium, 2-[2-[3-[(1,3-dihydro-1,3,3,5-tetramethyl-2H-indol-2-ylidene)ethylidene]-2-(diphenylamino)-1-cyclopenten-1-yl]ethenyl]-1,3,3,5-tetramethyl-, tetrafluoroborate(1-) (9CI) (CA INDEX NAME)

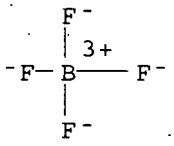
CM 1

CRN 183745-00-8
CMF C45 H48 N3



CM 2

CRN 14874-70-5
CMF B F4
CCI CCS

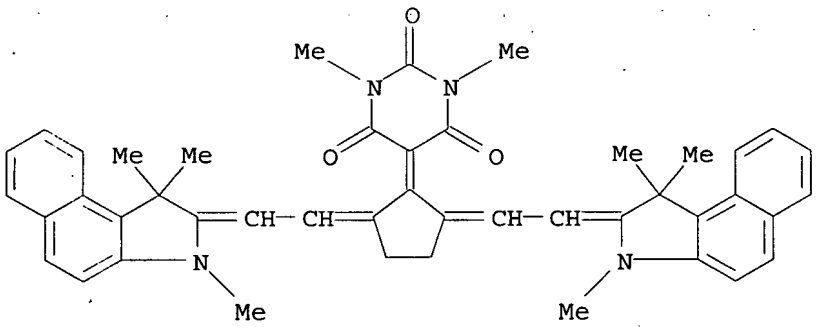


IC ICM G03C001-76
ICS G03C001-498; G03C001-74; G03C005-08; G03D013-00
CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
IT **183745-01-9** 518021-36-8
(dye, outermost backing layer comprising; heat-developable photog. films with certain surface energy on their outermost backing layer for easy conveying)

L44 ANSWER 19 OF 43 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2003:71189 HCAPLUS
DOCUMENT NUMBER: 138:129053
TITLE: Thermal-transfer printing sheet with light-to-heat converting layer containing nonionic dye
INVENTOR(S): Yamamoto, Mitsuru; Matsushita, Tetsunori
PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 35 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2003025743	A	20030129	JP 2001-213793 <--	20010713
PRIORITY APPLN. INFO.:			JP 2001-213793 <--	20010713

OTHER SOURCE(S): MARPAT 138:129053
ED Entered STN: 29 Jan 2003
AB In the thermal-transfer printing set comprising the sheet and an image receptor, the sheet comprises a support coated with a light-to-heat converting layer with OD/T ≥0.57 (OD = optical d.; T = layer thickness) containing a nonionic dye and an image-forming layer. The nonionic dye may be merocyanine dye. The sheet shows stable transfer ratio even when environmental condition changes and gives clear images.
IT **259133-57-8**
(thermal-transfer printing sheet with light-to-heat converting layer containing nonionic dye)
RN 259133-57-8 HCAPLUS
CN 2,4,6(1H,3H,5H)-Pyrimidinetrione, 5-[2,5-bis[(1,3-dihydro-1,1,3-trimethyl-2H-benz[e]indol-2-ylidene)ethylidene]cyclopentylidene]-1,3-dimethyl- (9CI) (CA INDEX NAME)



IC ICM B41M005-40
ICS B41M005-26
CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
Section cross-reference(s): 41
IT **259133-57-8** 491080-15-0 491080-16-1 491080-17-2
(thermal-transfer printing sheet with light-to-heat converting layer containing nonionic dye)

L44 ANSWER 20 OF 43 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2002:752281 HCAPLUS
DOCUMENT NUMBER: 137:270622
TITLE: Planographic printing plate precursor for image recording material
INVENTOR(S): Aoshima, Keitaro; Kikuchi, Kei
PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan
SOURCE: Eur. Pat. Appl., 22 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1245405	A2	20021002	EP 2002-6627 <--	20020325
EP 1245405	A3	20050601		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
JP 2002296768	A	20021009	JP 2001-97299 <--	20010329
US 2003008228	A1	20030109	US 2002-101695 <--	20020321
PRIORITY APPLN. INFO.:			JP 2001-97299 A <--	20010329

→ ank for Undercoat

OTHER SOURCE(S): MARPAT 137:270622
ED Entered STN: 04 Oct 2002
AB The present invention relates to a planog. printing plate precursor that has sensitivity to a UV ray, a visible ray, or an IR ray. The present invention relates to a so-called neg.-type image recording materials capable of directly plate-making by using a laser from a digital signal of a computer or the like. A neg.-type image recording material comprises a support having a rear surface and an image recording layer disposed on the support, the image recording layer having a front surface and including (A) a radical-generating agent

and (B) a radically polymerizable compound, wherein a static friction coefficient between the front surface and the rear surface is < 0.50. In order to achieve such a specified static friction coefficient, it is preferable that the image recording layer contains (D) a compound represented by: R1-X (R1 = C8-32 hydrocarbon group; X = CO-Y-R2, NH-CO-NH-R2, SO2-Y-R2, Y-R3; Y = O, S, NR4 or a single bond; R2-4 = H, hydrocarbon having a total of not more than 20 carbon atoms).

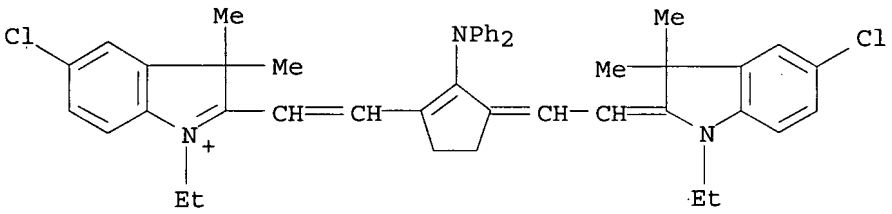
IT **442548-17-6**
(IR absorbent; planog. printing plates precursor for image recording material containing)

RN 442548-17-6 HCAPLUS

CN 3H-Indolium, 5-chloro-2-[2-[3-[(5-chloro-1-ethyl-1,3-dihydro-3,3-dimethyl-2H-indol-2-ylidene)ethylidene]-2-(diphenylamino)-1-cyclopenten-1-yl]ethenyl]-1-ethyl-3,3-dimethyl-, salt with trifluoromethanesulfonic acid (1:1) (9CI) (CA INDEX NAME)

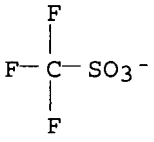
CM 1

CRN 162717-38-6
CMF C45 H46 Cl2 N3



CM 2

CRN 37181-39-8
CMF C F3 O3 S



IC ICM B41N006-00
ICS B41N001-08

CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
Section cross-reference(s): 38

IT 134127-48-3 162717-39-7 **442548-17-6**
(IR absorbent; planog. printing plates precursor for image recording material containing)

L44 ANSWER 21 OF 43 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2002:707555 HCAPLUS
DOCUMENT NUMBER: 137:255361
TITLE: Heat-mode negative-working lithographic printing master plate containing onium salt polymerization

initiator
INVENTOR(S): Shimada, Kazuto; Sorori, Tadahiro
PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 34 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

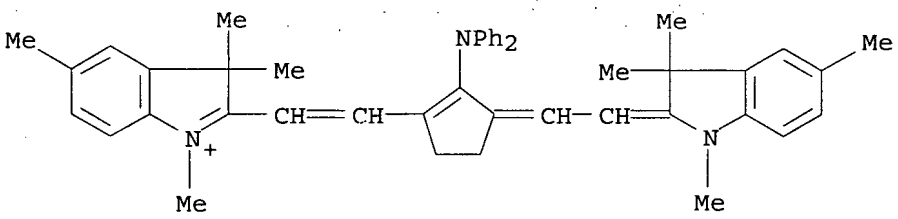
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2002268217	A	20020918	JP 2001-69168 <--	20010312
US 2003017411	A1	20030123	US 2002-93746 <--	20020311
US 6623910	B2	20030923		
EP 1241002	A2	20020918	EP 2002-5289 <--	20020312
EP 1241002	A3	20040102		
EP 1241002	B1	20060208		
R: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE, TR				
AT 317329	T	20060215	AT 2002-5289 <--	20020312

PRIORITY APPLN. INFO.: JP 2001-69168 A 20010312 <--

ED Entered STN: 18 Sep 2002
AB The heat-mode neg.-working lithog. printing master plate comprises an IR-laser recordable photosensitive layer on a support which contains (a) a light-to-heat conversion agent, (b) a compound having a polymerizable unsatd. group, and (c) an onium salt having a polyvalent counter ion as a polymerization initiator. The onium salt includes diazonium salts, iodonium salts, and sulfonium salts, and preferably, the polyvalent counter ion is valency between 2 and 6. The use of the onium salt having a polyvalent anion increased an electron d. of the counter anion, resulting in promoting a decomposition of the onium salt upon receiving heat.
IT **183745-01-9**
(light-to-heat conversion agent; heat-mode neg.-working lithog. printing master plate containing onium salt polymerization initiator)
RN 183745-01-9 HCAPLUS
CN 3H-Indolium, 2-[2-[3-[(1,3-dihydro-1,3,3,5-tetramethyl-2H-indol-2-ylidene)ethylidene]-2-(diphenylamino)-1-cyclopenten-1-yl]ethenyl]-1,3,3,5-tetramethyl-, tetrafluoroborate(1-) (9CI) (CA INDEX NAME)

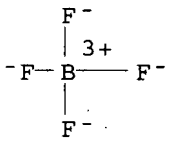
CM 1

CRN 183745-00-8
CMF C45 H48 N3



CM 2

CRN 14874-70-5
CMF B F4
CCI CCS



IC ICM G03F007-029
ICS B41N001-14; C08F002-50; G03F007-00
CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
Section cross-reference(s): 35, 38
IT **183745-01-9** 460337-33-1 460337-34-2
(light-to-heat conversion agent; heat-mode neg.-working lithog. printing master plate containing onium salt polymerization initiator)

L44 ANSWER 22 OF 43 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2002:606235 HCAPLUS
DOCUMENT NUMBER: 137:161407
TITLE: Laser-sensitive negative-working lithographic original plate with backcoat layer
INVENTOR(S): Aoshima, Keitaro
PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 31 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2002225453	A	20020814	JP 2001-20131 <--	20010129
PRIORITY APPLN. INFO.:			JP 2001-20131 <--	20010129

ED Entered STN: 14 Aug 2002
AB In the plate comprising a support coated with a photosensitive layer in which IR laser-exposed area becomes hydrophobic, and a backcoat layer containing (1) an organic polymer with glass transition temperature ≥20° or (2) an organic polymer and a sol-gel reaction

product formed by hydrolyzing and condensing a metal compound The plate is directly made from digital date using IR laser and shows good storage stability and abrasion resistance.

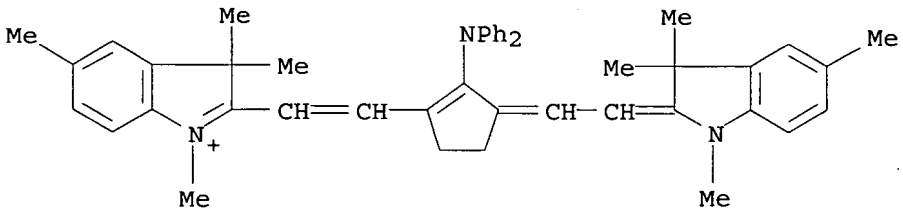
IT **197087-00-6**
(IR absorbent; IR-sensitive lithog. plate with backcoat layer and photosensitive layer)

RN 197087-00-6 HCAPLUS

CN 3H-Indolium, 2-[2-[3-[(1,3-dihydro-1,3,3,5-tetramethyl-2H-indol-2-ylidene)ethylidene]-2-(diphenylamino)-1-cyclopenten-1-yl]ethenyl]-1,3,3,5-tetramethyl-, perchlorate (9CI) (CA INDEX NAME)

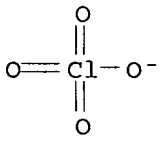
CM 1

CRN 183745-00-8
CMF C45 H48 N3



CM 2

CRN 14797-73-0
CMF Cl O4



IC ICM B41N003-00
ICS G03F007-00; G03F007-004; G03F007-027; G03F007-029; G03F007-032; G03F007-033; G03F007-038; G03F007-09

CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
Section cross-reference(s): 38

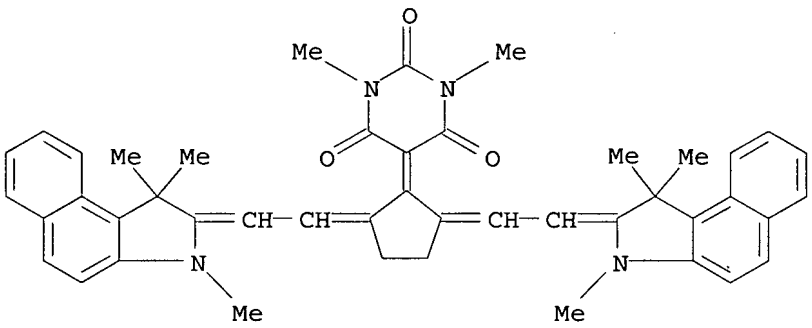
IT 85568-56-5, Megafac F 177 134127-48-3 **197087-00-6**
(IR absorbent; IR-sensitive lithog. plate with backcoat layer and photosensitive layer)

L44 ANSWER 23 OF 43 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2002:538432 HCAPLUS
DOCUMENT NUMBER: 137:101449
TITLE: Photopolymerizable compositions for near IR laser exposure and lithographic plates using them with excellent sensitivity and storage stability
INVENTOR(S): Tsurutani, Yasuyuki; Toshimitsu, Eriko
PATENT ASSIGNEE(S): Mitsubishi Chemical Corp., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 27 pp.

CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2002202592	A	20020719	JP 2001-75248 <--	20010316
PRIORITY APPLN. INFO.:			JP 2000-324902 A <--	20001025

OTHER SOURCE(S): MARPAT 137:101449
ED Entered STN: 19 Jul 2002
AB The compns. contain ethylenic monomers, photopolymn. initiators (consisting of sensitizing dyes and radical generators, preferably) generating radicals by light with wavelength 600-1300 nm, and amine compds. having atomic groups NCH2.
IT **259133-57-8**
(amine-containing photopolymerizable compns. for lithog. plates with good near IR laser sensitivity and storage stability)
RN 259133-57-8 HCAPLUS
CN 2,4,6(1H,3H,5H)-Pyrimidinetrione, 5-[2,5-bis[(1,3-dihydro-1,1,3-trimethyl-2H-benz[e]indol-2-ylidene)ethylidene]cyclopentylidene]-1,3-dimethyl- (9CI) (CA INDEX NAME)



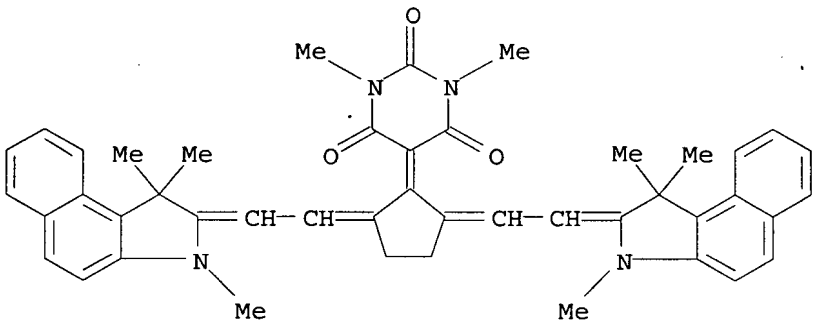
IC ICM G03F007-004
ICS G03F007-004; B41N001-14; G03F007-00; G03F007-029
CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
IT **259133-57-8**
(amine-containing photopolymerizable compns. for lithog. plates with good near IR laser sensitivity and storage stability)

L44 ANSWER 24 OF 43 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2002:480572 HCAPLUS
DOCUMENT NUMBER: 137:70521
TITLE: Photopolymerizable compositions and their presensitized lithographic plates having enhanced plate wear characteristics and high sensitivity
INVENTOR(S): Urano, Toshiyoshi; Okamoto, Hideaki
PATENT ASSIGNEE(S): Mitsubishi Chemical Corp., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 22 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2002182391	A	20020626	JP 2000-384632 <--	20001219
PRIORITY APPLN. INFO.:			JP 2000-384632 <--	20001219

ED Entered STN: 26 Jun 2002
AB The compns. for lithog. plates contain (A) polymer binders involving structure units CH2CR31[CO2CHR32CH(OH)V] (R31 = H, Me; R32 = alkyl, H; V = epoxy group-containing ethylenically unsatd. compound residue) and (meth)acrylonitrile-derived units, (B) ethylenically unsatd. compds., (C) photopolymn. initiators, and optionally (D) sensitizing dyes.
IT **259133-57-8**
(sensitizing dye; photopolymerizable compns. for presensitized lithog. plates having enhanced plate wear characteristics and high sensitivity)
RN 259133-57-8 HCAPLUS
CN 2,4,6(1H,3H,5H)-Pyrimidinetrione, 5-[2,5-bis[(1,3-dihydro-1,1,3-trimethyl-2H-benz[e]indol-2-ylidene)ethylidene]cyclopentylidene]-1,3-dimethyl- (9CI) (CA INDEX NAME)



IC ICM G03F007-038
ICS B41N001-14; C08F002-50; C08F290-12; G03F007-00; G03F007-027; G03F007-028
CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
Section cross-reference(s): 38
IT 90-93-7, 4,4'-Bis(diethylamino)benzophenone 147-14-8, Copper phthalocyanine 131083-16-4 **259133-57-8**
(sensitizing dye; photopolymerizable compns. for presensitized lithog. plates having enhanced plate wear characteristics and high sensitivity)

L44 ANSWER 25 OF 43 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2002:480571 HCAPLUS
DOCUMENT NUMBER: 137:70520
TITLE: Photopolymerizable compositions and their presensitized lithographic plates having enhanced plate wear characteristics and high sensitivity
INVENTOR(S): Urano, Toshiyoshi; Noguchi, Motoyoshi
PATENT ASSIGNEE(S): Mitsubishi Chemical Corp., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 25 pp.
CODEN: JKXXAF

DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2002182390	A	20020626	JP 2000-384626 <--	20001219
PRIORITY APPLN. INFO.:			JP 2000-384626 <--	20001219

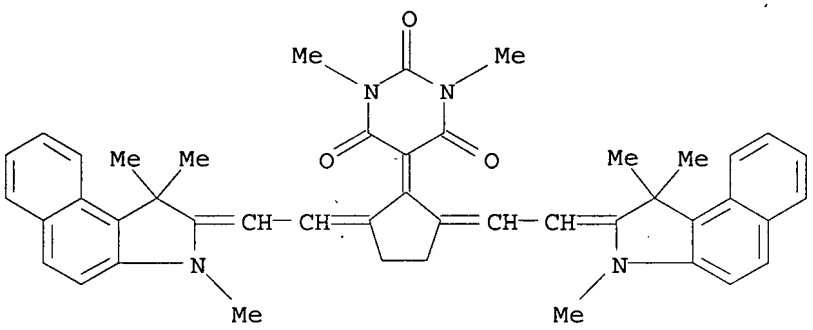
ED Entered STN: 26 Jun 2002

AB The compns. for lithog. plates contain (A) polymer binders involving structure units CH2CR31[CO2CHR32CH(OH)V] (R31 = H, Me; R32 = alkyl, H; V = epoxy group-containing ethylenically unsatd. compound residue) and CH2CR31[CO2(CH2CR34R37)nH] (R31 = Me, H; R34 = alkyl, H; R37 = CO2H, carboxylic acid ester, CN, Ph; n = 10-1000 integer), (B) ethylenically unsatd. compds., (C) photopolymn. initiators, and optionally (D) sensitizing dyes.

IT **259133-57-8**
(sensitizing dye; photopolymerizable compns. for presensitized lithog. plates having enhanced plate wear characteristics and high sensitivity)

RN 259133-57-8 HCAPLUS

CN 2,4,6(1H,3H,5H)-Pyrimidinetrione, 5-[2,5-bis[(1,3-dihydro-1,1,3-trimethyl-2H-benz[e]indol-2-ylidene)ethylidene]cyclopentylidene]-1,3-dimethyl- (9CI) (CA INDEX NAME)



IC ICM G03F007-038
ICS B41N001-14; C08F002-50; C08F246-00; C08F290-12; G03F007-00; G03F007-027; G03F007-028

CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
Section cross-reference(s): 38

IT 90-93-7, 4,4'-Bis(diethylamino)benzophenone 147-14-8, Copper phthalocyanine 131083-16-4 **259133-57-8**
(sensitizing dye; photopolymerizable compns. for presensitized lithog. plates having enhanced plate wear characteristics and high sensitivity)

L44 ANSWER 26 OF 43 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2002:439003 HCAPLUS
DOCUMENT NUMBER: 137:26138
TITLE: Photopolymerization lithographic printing plate for near-infrared laser exposure and its manufacture

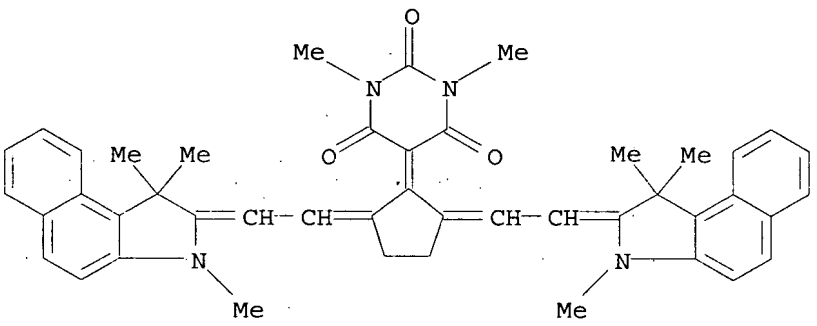
INVENTOR(S): Urano, Toshiyoshi
PATENT ASSIGNEE(S): Mitsubishi Chemical Corp., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 38 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2002166669	A	20020611	JP 2000-362422 <--	20001129
PRIORITY APPLN. INFO.:			JP 2000-287935 A <--	20000922

ED Entered STN: 11 Jun 2002

AB The plate comprises a hydrophilic support having thereon a photosensitive layer containing (A) an ethylenically unsatd. compound, (B) a cyanine sensitizing dye cation linked with a heterocyclic ring through a polymethine chain and/or phthalocyanine sensitizing dye, and (C) an organic boron anion and/or a halomethyl-containing compound .It is characterized by that peel strength of gum tape from the hydrophilic support is ≤500 g/cm. The plate is manufactured by the following steps: (1) exposing the photosensitive layer by near IR ray for hardening imagewise; (2) installing the exposed plate on a printing cylinder; and (3) removing unhardened areas from the support to a blanket roller surface by adhesion of ink supplied together with damping water. The plate showed high sensitivity can be developed without using alkaline developer, and handled under white fluorescent lamp.

IT **259133-57-8**
(sensitizer; photopolymerizable lithog plate for IR laser exposure)
RN 259133-57-8 HCAPLUS
CN 2,4,6(1H,3H,5H)-Pyrimidinetrione, 5-[2,5-bis[(1,3-dihydro-1,1,3-trimethyl-2H-benz[e]indol-2-ylidene)ethylidene]cyclopentylidene]-1,3-dimethyl- (9CI) (CA INDEX NAME)



IC ICM B41N001-14
ICS B41C001-055; G03F007-00; G03F007-028; G03F007-029
CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
Section cross-reference(s): 38
IT **259133-57-8** 328063-81-6
(sensitizer; photopolymerizable lithog plate for IR laser exposure)

L44 ANSWER 27 OF 43 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2002:407168 HCAPLUS
DOCUMENT NUMBER: 137:13255
TITLE: Near IR laser-sensitive photopolymerizable compositions and manufacture of lithographic plates using the same
INVENTOR(S): Okamoto, Hideaki; Kobori, Kazuhiro
PATENT ASSIGNEE(S): Mitsubishi Chemical Corp., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 29 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2002156751	A	20020531	JP 2000-369416	20001205

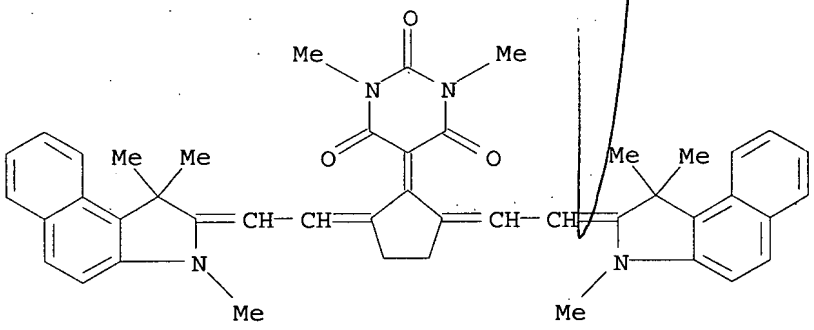
PRIORITY APPLN. INFO.: JP 2000-267932 A 20000905

ED Entered STN: 31 May 2002

AB The compns. contain (A) ethylenically unsatd. compds., (B) cyanine-based sensitizing dyes having heterocyclic rings bonded via polymethyne chains and/or phthalocyanine-based sensitizing dyes, (C) organic boric anions and/or halomethyl group-containing compds., and (D) 3< and ≤20% colorants having absorption maximum at 450-650 nm, preferably basic dyes, more preferably, triphenylmethane-based dyes. The compns. are applied on lithog. supports, exposed to near IR laser of 750-1200 nm, and developed with alkali developers to give lithog. plates. The colorants of that absorption maximum can be compounded in the compns. relatively large amts., offering good visibility of the images, without sacrificing the sensitivity to near IR light. Moreover, treatment such as dispersing is not necessary and the compns. are free from problems like aggregation of the colorants, thereby offering good storage stability and durability in printing.

IT **259133-57-8**
(sensitizer; near IR laser-sensitive photopolymerizable compns. containing colorants of specific λmax for lithog. plates)

RN 259133-57-8 HCAPLUS
CN 2,4,6(1H,3H,5H)-Pyrimidinetrione, 5-[2,5-bis[(1,3-dihydro-1,1,3-trimethyl-2H-benz[e]indol-2-ylidene)ethylidene]cyclopentylidene]-1,3-dimethyl- (9CI) (CA INDEX NAME)



IC ICM G03F007-004
ICS C08F002-50; G03F007-00; G03F007-027; G03F007-029

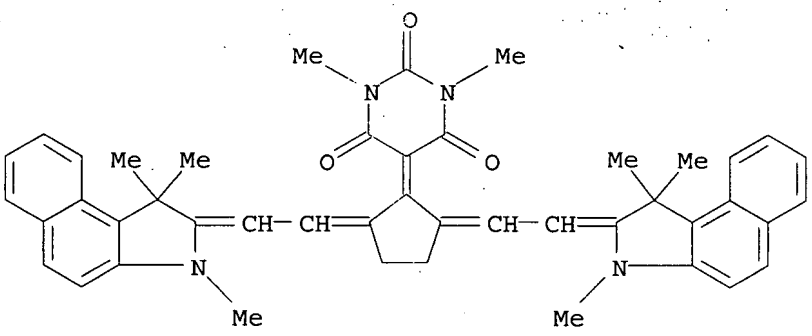
CC 74-4 (Radiation Chemistry, Photochemistry, and Photographic and Other

Reprographic Processes)
Section cross-reference(s): 38
IT **259133-57-8**
(sensitizer; near IR laser-sensitive photopolymerizable compns. containing colorants of specific λmax for lithog. plates)

L44 ANSWER 28 OF 43 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2001:760373 HCAPLUS
DOCUMENT NUMBER: 135:325271
TITLE: Photopolymerizable compositions containing urethane compounds, presensitized lithographic printing plates therefrom, and platemaking method
INVENTOR(S): Okamoto, Hideaki; Urano, Toshiyoshi; Noguchi, Motoharu
PATENT ASSIGNEE(S): Mitsubishi Chemical Corp., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 19 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2001290267	A	20011019	JP 2001-16536 <--	20010125
PRIORITY APPLN. INFO.:			JP 2000-23993 A <--	20000201

ED Entered STN: 19 Oct 2001
AB The compns. contain ethylenic monomers (including urethane compds. having ≥4 urethane bonds and ≥4 addition-polymerizable double bonds) and photopolymn. initiator systems. Thus, a composition containing a reaction product of NK Ester A 9530 (dipentaerythritol pentaacrylate-based compound) and ME 20-100 (polyisocyanate) 44, 2-(methacryloyloxy)ethyl phosphate 11, a titanocene radical generator 5, dipyrromethene boron difluoride-based sensitizers 1.0, and Me methacrylate-methacrylic acid-Cyclomer A 200 (alicyclic epoxy acrylate) copolymer 45 parts was applied on an anodized Al plate, exposed to a laser beam, and developed with an alkali solution to give a test piece with good resolution and durability.
IT **259133-57-8**
(sensitizer; photopolymerizable compns. containing urethane compds. for photosensitive lithog. plates with good resolution and durability)
RN 259133-57-8 HCAPLUS
CN 2,4,6(1H,3H,5H)-Pyrimidinetrione, 5-[2,5-bis[(1,3-dihydro-1,1,3-trimethyl-2H-benz[e]indol-2-ylidene)ethylidene]cyclopentylidene]-1,3-dimethyl- (9CI) (CA INDEX NAME)

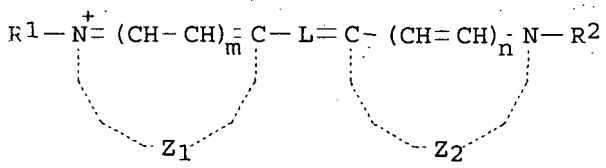


IC ICM G03F007-027
ICS C08F002-50; C08F299-06; G03F007-00; G03F007-004; G03F007-029; G03F007-031; G03F007-032
CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
IT 55799-81-0 141052-73-5 **259133-57-8** 367965-49-9
(sensitizer; photopolymerizable compns. containing urethane compds. for photosensitive lithog. plates with good resolution and durability)

L44 ANSWER 29 OF 43 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2001:28872 HCAPLUS
DOCUMENT NUMBER: 134:108067
TITLE: Photothermographic copying materials containing water-soluble IR absorbing dyes
INVENTOR(S): Arimoto, Naoshi; Sasaki, Kamiyuki
PATENT ASSIGNEE(S): Konica Co., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 38 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2001005141	A	20010112	JP 2000-115053 <--	20000417
US 6391535	B1	20020521	US 2000-550553 <--	20000417
PRIORITY APPLN. INFO.:			JP 1999-110795 A <--	19990419

OTHER SOURCE(S): MARPAT 134:108067
ED Entered STN: 12 Jan 2001
GI



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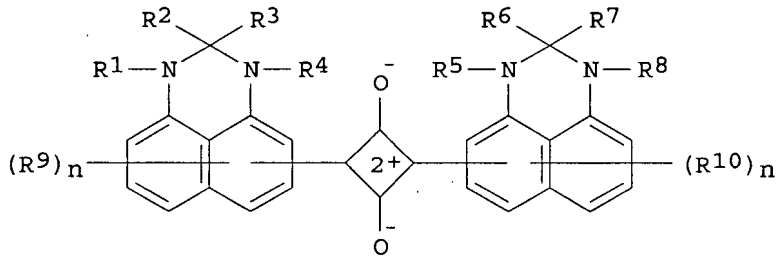


II

AB The material, showing minimized d. unevenness derived from interference fringes, contains organic Ag salts and photosensitive Ag halides and have subbing layers which contain (i) water-soluble IR absorbing dyes with the maximum absorption wavelength (λmax) 700-900 nm, (ii) Cu-containing phosphoric acid compds., or (ii) metal oxide micropowders of λmax ≥600 nm. The dyes may be polymethine dyes I [Z1, Z2 = 5- or 6-membered azacycle; R1, R2 = alk(en)yl, aralkyl; L = conjugated linkage comprising 5, 7 , or 9 methines; m,n,p = 0, 1; X = anion] or squarylium dyes II [R1, R4, R5, R8 = H, C1-20 (cyclo)alkyl, C≤14 aryl(alkyl); R2, R3, R6, R7 = H, C1-20 (cyclo)alkyl, C≤14 aryl(alkyl), CH2OR [R = alkylacyl, COR' (R' = C1-20 alkyl)], alkylsilyl, alkylsulfonyl; R9, R10 = monovalent group; n = 1-3].

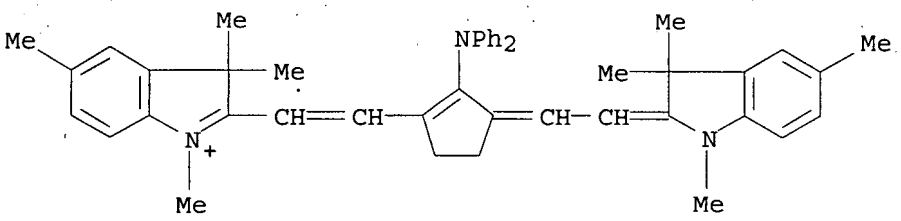
IT **197087-00-6**
(IR absorbing dyes; photothermog. materials containing IR absorbing dyes, Cu-containing phosphoric acids, or oxide powders in subbing layers)

RN 197087-00-6 HCAPLUS

CN 3H-Indolium, 2-[2-[3-[(1,3-dihydro-1,3,3,5-tetramethyl-2H-indol-2-ylidene)ethylidene]-2-(diphenylamino)-1-cyclopenten-1-yl]ethenyl]-1,3,3,5-tetramethyl-, perchlorate (9CI) (CA INDEX NAME)

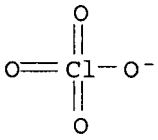
CM 1

CRN 183745-00-8
CMF C45 H48 N3



CM 2

CRN 14797-73-0
CMF Cl O4



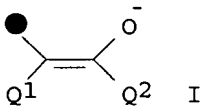
IC ICM G03C001-498
ICS G03C001-76
CC 74-7 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
Section cross-reference(s): 41
IT 3599-32-4 161375-44-6 161375-45-7 183745-24-6 184892-21-5
197087-00-6 197087-01-7 318294-04-1
(IR absorbing dyes; photothermog. materials containing IR absorbing dyes, Cu-containing phosphoric acids, or oxide powders in subbing layers)

L44 ANSWER 30 OF 43 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2000:313524 HCAPLUS
DOCUMENT NUMBER: 132:341204
TITLE: Photopolymerizable composition and lithographic printing plate and image formation method using it
INVENTOR(S): Urano, Toshiyoshi; Nagao, Takumi; Hino, Etsuko
PATENT ASSIGNEE(S): Mitsubishi Chemical Industries Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 20 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2000131837	A	20000512	JP 1999-227083 <--	19990811
JP 3889530	B2	20070307		
US 6153356	A	20001128	US 1999-374846 <--	19990816
PRIORITY APPLN. INFO.:			JP 1998-230373 <--	A 19980817

OTHER SOURCE(S): MARPAT 132:341204

ED Entered STN: 15 May 2000
GI



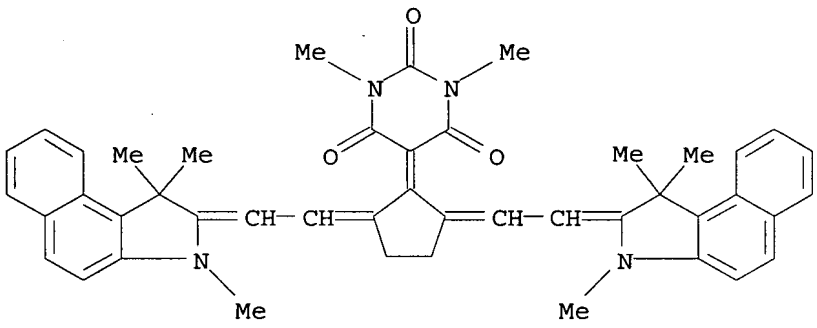
I

AB The title composition contains (A) ethylenically unsatd. compound, (B) cyanine dye, and (C) photopolymn. initiator. In the composition, the cyanine dye has a structure in which heteroatoms (O, S, or N) are connected by polymethine chains having ≥1 substituent I (Q1, Q2 = substituents; Q1 may connects with Q2 to form a ring). Preferably, the substituent I is (thio)barbituric acid group. The lithog. printing plate has a layer of the photopolymerizable composition on a support, and the layer is exposed to light at 700-1300 nm and developed with an alkali solution for image formation. The photopolymerizable composition has high sensitivity to visible light and near-IR light.

IT **259133-57-8**
(photopolymerizable composition containing cyanine dye for sensitivity to visible light and near-IR light for lithog. printing plate)

RN 259133-57-8 HCAPLUS

CN 2,4,6(1H,3H,5H)-Pyrimidinetrione, 5-[2,5-bis[(1,3-dihydro-1,1,3-trimethyl-2H-benz[e]indol-2-ylidene)ethylidene]cyclopentylidene]-1,3-dimethyl- (9CI) (CA INDEX NAME)



IC ICM G03F007-027
ICS C08F002-48; G03F007-00; G03F007-004; G03F007-028

CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
Section cross-reference(s): 27

IT **259133-57-8** 259133-58-9
(photopolymerizable composition containing cyanine dye for sensitivity to visible light and near-IR light for lithog. printing plate)

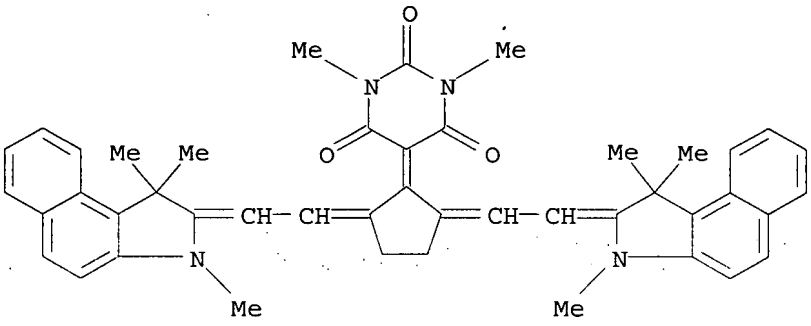
L44 ANSWER 31 OF 43 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2000:129635 HCAPLUS
DOCUMENT NUMBER: 132:171431
TITLE: Positive-working photosensitive composition and presensitized lithographic plate
INVENTOR(S): Urano, Toshiyoshi; Minakami, Junji
PATENT ASSIGNEE(S): Mitsubishi Chemical Industries Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 18 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2000056452	A	20000225	JP 1998-222567 <--	19980806
JP 3772542	B2	20060510		

PRIORITY APPLN. INFO.: JP 1998-222567 <-- 19980806

OTHER SOURCE(S): MARPAT 132:173431
ED Entered STN: 25 Feb 2000
AB The title photosensitive composition, containing a light-heat-converting substance which absorbs light from an imagewise exposure light source to convert to heat and an alkali-soluble resin, employs a near IR ray-absorbing dye having a structure in which the heterocycles combine through a polymethine chain having a (thio)barbituric acid group as a substituent as the light-heat-converting substance. A presensitized lithog. plate is also claimed, comprising a support coated with a photosensitive layer made of the composition The composition shows high sensitivity toward light in near IR regions and improved development latitude.
IT **259133-57-8P**
(presensitized lithog. plate containing polymethine dye with barbituric acid group as lithog. heat-converting agent)
RN 259133-57-8 HCAPLUS
CN 2,4,6(1H,3H,5H)-Pyrimidinetrione, 5-[2,5-bis[(1,3-dihydro-1,1,3-trimethyl-2H-benz[e]indol-2-ylidene)ethylidene]cyclopentylidene]-1,3-dimethyl- (9CI) (CA INDEX NAME)



IC ICM G03F007-004
ICS G03F007-00; G03F007-023
CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
Section cross-reference(s): 41
IT 35464-74-5P, m-Cresol-p-cresol-formaldehyde-phenol copolymer
259133-57-8P 259133-58-9P
(presensitized lithog. plate containing polymethine dye with barbituric acid group as lithog. heat-converting agent)

L44 ANSWER 32 OF 43 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1999:137104 HCAPLUS

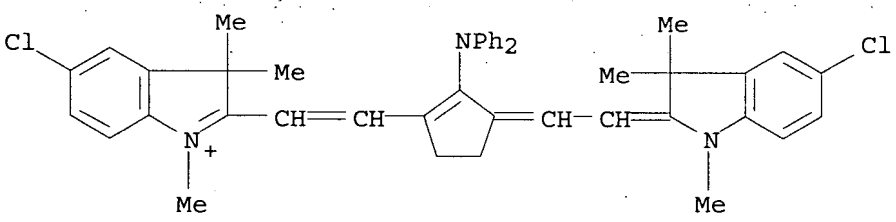
DOCUMENT NUMBER: 130:202872
TITLE: Heat-developable silver halide color photographic material without colloidal silver and imaging method using it
INVENTOR(S): Araga, Jun
PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 98 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 11052525	A	19990226	JP 1997-221926 <--	19970804
PRIORITY APPLN. INFO.:			JP 1997-221926 <--	19970804

ED Entered STN: 03 Mar 1999
AB The material with IR transmittance at 950 nm 1.7-3.5 has ≥1 photog. layer containing Ag halide, a color developer, a coupler, and a binder on a transparent support to show the total weight of Ag to be coated 0.5-5.0 g/m2 but no nonphotosensitive colloidal Ag. The title imaging involves processing of the above material at 60-100° for 5-60 s. Due to absence of colloidal Ag, the image can be read by a CCD image sensor and printed on hard copy materials. Although free of colloidal Ag, it has good transporting property in cameras and processors and gives high-quality images by rapid processing.
IT **110992-87-5P**
(IR-absorbing dye; heat-developable silver halide color photog. material without colloidal silver and its imaging)
RN 110992-87-5 HCAPLUS
CN 3H-Indolium, 5-chloro-2-[2-[3-[(5-chloro-1,3-dihydro-1,3,3-trimethyl-2H-indol-2-ylidene)ethylidene]-2-(diphenylamino)-1-cyclopenten-1-yl]ethenyl]-1,3,3-trimethyl-, tetrafluoroborate(1-) (9CI) (CA INDEX NAME)

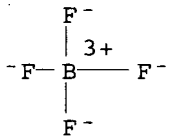
CM 1

CRN 110992-86-4
CMF C43 H42 Cl2 N3



CM 2

CRN 14874-70-5
CMF B F4
CCI CCS



IC ICM G03C007-392
ICS G03C001-00; G03C001-035; G03C001-40; G03C001-42; G03C001-74; G03C008-40
CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
IT **110992-87-5P** 177167-90-7P 177167-94-1P
(IR-absorbing dye; heat-developable silver halide color photog. material without colloidal silver and its imaging)

L44 ANSWER 33 OF 43 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1999:42556 HCAPLUS
DOCUMENT NUMBER: 130:102883
TITLE: Near IR-sensitive photoimageable/photopolymerizable compositions
INVENTOR(S): Weed, Gregory Charles; Fabricius, Dietrich Max
PATENT ASSIGNEE(S): E. I. Du Pont de Nemours & Co., USA
SOURCE: Eur. Pat. Appl., 32 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 889363	A1	19990107	EP 1998-100692 <--	19980116
EP 889363	B1	20051005		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
AU 746399	B2	20020502	AU 1998-52167 <--	19980120
AU 9852167	A	19990812		
JP 11149154	A	19990602	JP 1998-91870 <--	19980403
US 2002064728	A1	20020530	US 2001-775988 <--	20010202
US 2004191681	A1	20040930	US 2004-819820 <--	20040407
US 6861201	B2	20050301		

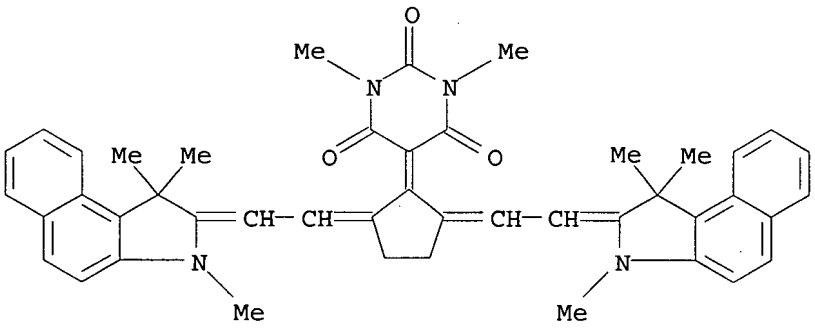
PRIORITY APPLN. INFO.: US 1996-708476 A 19960905 <--
US 1997-888242 A 19970703 <--
US 2001-775988 A1 20010202 <--
OTHER SOURCE(S): MARPAT 130:102883
ED Entered STN: 21 Jan 1999
AB Novel photoimageable/photopolymerizable compns. are disclosed which contain dyes that absorb strongly in the near IR regions. These dyes are useful as photosensitizers for initiating a variety of

photoimaging and photopolymn. reactions. Imaging media are disclosed herein which are sensitive in the near IR regions and which can initiate polymerization of ethylenically unsatd. monomer components in neg.-acting photopolymer systems and/or which can initiate conversion of leuco dyes to their corresponding colored dye form. These imaging media comprise either a near IR dye photochem. sensitizer, a hexaarylbiimidazole photoinitiator, a chain transfer agent, and a photopolymerizable material. These imaging media are useful in a variety of photopolymer products, including photoresists, proofing films, and holog. recording films.

IT **259133-57-8P**
(preparation and use as photosensitizer for photopolymerizable photoimaging compns.)

RN 259133-57-8 HCAPLUS

CN 2,4,6(1H,3H,5H)-Pyrimidinetrione, 5-[2,5-bis[(1,3-dihydro-1,1,3-trimethyl-2H-benz[e]indol-2-ylidene)ethylidene]cyclopentylidene]-1,3-dimethyl- (9CI) (CA INDEX NAME)



IC ICM G03F007-031
ICS G03C001-73; B41M005-36

CC 74-4 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

IT 100498-66-6P 219537-49-2P 219537-52-7P 219537-55-0P
219537-57-2P 219537-58-3P 219537-60-7P 219537-61-8P
259133-57-8P
(preparation and use as photosensitizer for photopolymerizable photoimaging compns.)

REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L44 ANSWER 34 OF 43 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1998:505247 HCAPLUS
DOCUMENT NUMBER: 129:195748
TITLE: Silver halide color photographic material containing an infrared-absorbing dye to improve processing stability and storage stability
INVENTOR(S): Ishii, Yoshio; Yabuki, Yoshiji
PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 75 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 10207010	A	19980807	JP 1997-19591 <--	19970120
US 6210871	B1	20010403	US 1998-9773 <--	19980120
PRIORITY APPLN. INFO.:			JP 1997-19591 A <--	19970120

ED Entered STN: 14 Aug 1998

AB Claimed color photog. material having ≥1 each of blue-, green-, and red-sensitive silver halide emulsion layers and a light-insensitive hydrophilic colloid layer containing black silver particles on a support is characterized in (1) that the material contains an IR-absorbing dye having the absorption maximum at 700-1100 nm, (2) that the silver coating weight for silver halide and colloidal silver is ≤3.2 g/m2 and (3) that the transmission d. of the material at the 950 nm is ≥1.7. It reduces the variance of photog. properties during consecutive laboratory operation, and improves the film transport in the processing machine, and also improve the shelf life of the material. Suitable dyes are di-, tri-, and tetra-carbocyanine dyes. Thus, 11-diphenylamino-10,13-ethylene-1,3,4-trimethyl-5-carboxybenzopyrrolidino-tetracarbocyanine was added to the antihalation layer containing colloidal silver particles.

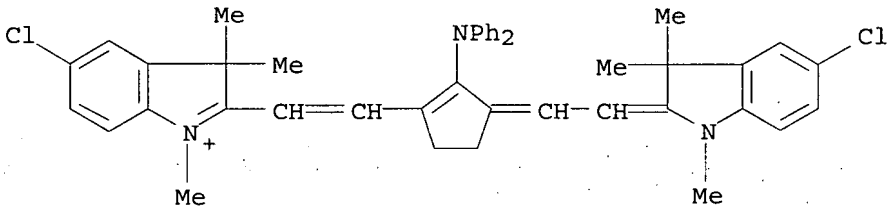
IT **110992-87-5P**
(dye; color photog. material containing IR-absorbing dye and colloidal Ag to improve processing stability and storage stability)

RN 110992-87-5 HCAPLUS

CN 3H-Indolium, 5-chloro-2-[2-[3-[(5-chloro-1,3-dihydro-1,3,3-trimethyl-2H-indol-2-ylidene)ethylidene]-2-(diphenylamino)-1-cyclopenten-1-yl]ethenyl]-1,3,3-trimethyl-, tetrafluoroborate(1-) (9CI) (CA INDEX NAME)

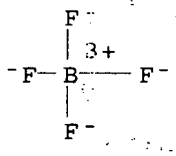
CM 1

CRN 110992-86-4
CMF C43 H42 Cl2 N3



CM 2

CRN 14874-70-5
CMF B F4
CCI CCS



IC ICM G03C001-825
ICS G03C001-74; G03C007-00
CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
IT **110992-87-5P** 177167-90-7P 177167-94-1P 177168-07-9P
177168-08-0P 177168-15-9P 186799-79-1P
(dye; color photog. material containing IR-absorbing dye and colloidal Ag to improve processing stability and storage stability)

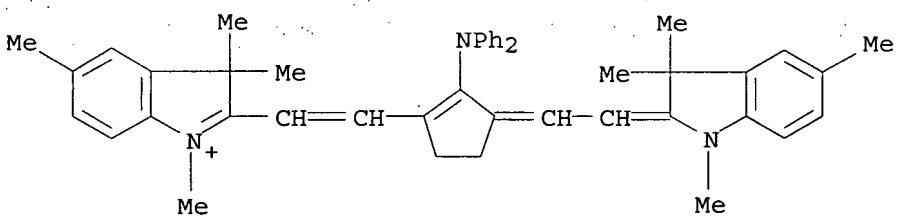
L44 ANSWER 35 OF 43 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1997:765501 HCAPLUS
DOCUMENT NUMBER: 128:95296
TITLE: Photosensitive material for laser beam exposure
INVENTOR(S): Totani, Ichizo; Harada, Toru
PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 27 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 09311393	A	19971202	JP 1996-151539 <--	19960523
JP 3462663	B2	20031105		
PRIORITY APPLN. INFO.:			JP 1996-151539 <--	19960523

ED Entered STN: 08 Dec 1997
AB The material comprises a support having an absorbance of ≥0.3 at exposure wavelength and ≤0.2 at 500 nm and a Ag halide emulsion layer, coated thereon, containing Ag halide grains with average grain size 0.01-0.4 μm. The material may be a heat-developable photosensitive material. The material provides high quality images without interference stripes by using laser beams.
IT **183745-01-9**
(laser beam exposure photog. film using light absorption-controlled support)
RN 183745-01-9 HCAPLUS
CN 3H-Indolium, 2-[2-[3-[(1,3-dihydro-1,3,3,5-tetramethyl-2H-indol-2-ylidene)ethylidene]-2-(diphenylamino)-1-cyclopenten-1-yl]ethenyl]-1,3,3,5-tetramethyl-, tetrafluoroborate(1-) (9CI) (CA INDEX NAME)

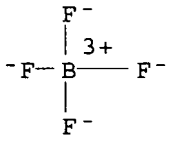
CM 1

CRN 183745-00-8
CMF C45 H48 N3



CM 2

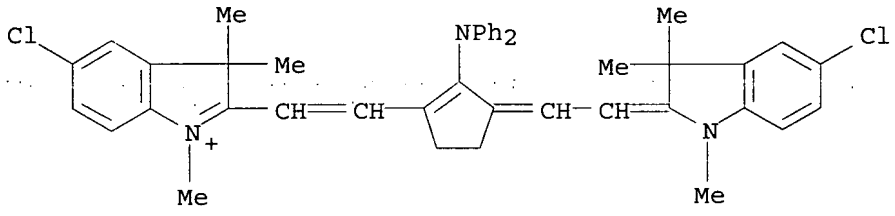
CRN 14874-70-5
CMF B F4
CCI CCS



IT **110992-87-5P**
(laser beam exposure photog. film using light absorption-controlled support)
RN 110992-87-5 HCAPLUS
CN 3H-Indolium, 5-chloro-2-[2-[3-[(5-chloro-1,3-dihydro-1,3,3-trimethyl-2H-indol-2-ylidene)ethylidene]-2-(diphenylamino)-1-cyclopenten-1-yl]ethenyl]-1,3,3-trimethyl-, tetrafluoroborate(1-) (9CI) (CA INDEX NAME)

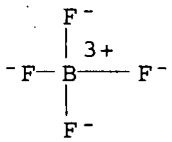
CM 1

CRN 110992-86-4
CMF C43 H42 Cl2 N3



CM 2

CRN 14874-70-5
CMF B F4
CCI CCS



IC ICM G03C001-00
ICS G03C001-035; G03C001-498; G03C001-74; G03C005-08
CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
IT **183745-01-9** 200863-72-5
(laser beam exposure photog. film using light absorption-controlled support)
IT **110992-87-5P**
(laser beam exposure photog. film using light absorption-controlled support)

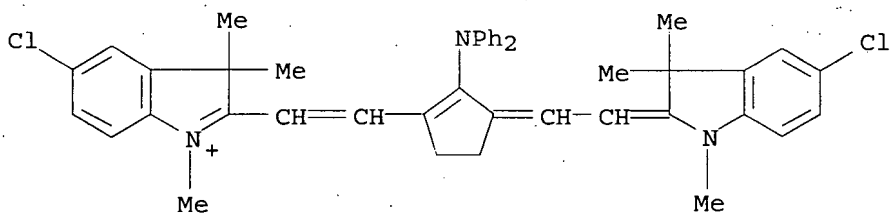
L44 ANSWER 36 OF 43 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1997:762033 HCAPLUS
DOCUMENT NUMBER: 128:95412
TITLE: Heat-developable silver halide photosensitive material
INVENTOR(S): Totani, Ichizou; Harada, Toru
PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 24 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 09304869	A	19971128	JP 1996-140904 <--	19960510
JP 3723634	B2	20051207		
PRIORITY APPLN. INFO.:			JP 1996-140904 <--	19960510

ED Entered STN: 06 Dec 1997
AB The material, exposed to ≥700 nm laser light, contains ≤0.1-μm Ag halide particles in an emulsion layer with absorbance ≥0.3 at the exposure wavelength. The material may contain a cyanine dye in the emulsion layer to control its absorbance. The material gives images without generation of interference fringes.
IT **110992-87-5P**
(dye; heat-developable silver halide photosensitive material giving image without interference fringe)
RN 110992-87-5 HCAPLUS
CN 3H-Indolium, 5-chloro-2-[2-[3-[(5-chloro-1,3-dihydro-1,3,3-trimethyl-2H-indol-2-ylidene)ethylidene]-2-(diphenylamino)-1-cyclopenten-1-yl]ethenyl]-1,3,3-trimethyl-, tetrafluoroborate(1-) (9CI) (CA INDEX NAME)

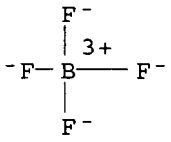
CM 1

CRN 110992-86-4
CMF C43 H42 Cl2 N3



CM 2

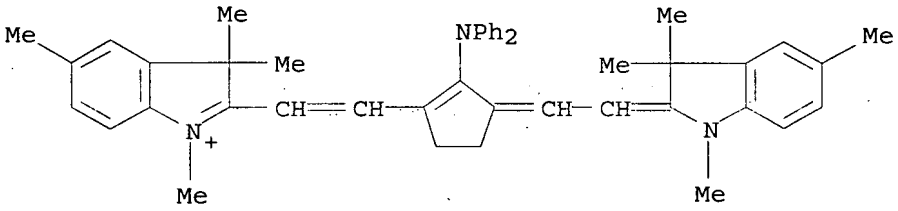
CRN 14874-70-5
CMF B F4
CCI CCS



IT **183745-01-9**
(dye; heat-developable silver halide photosensitive material giving image without interference fringe)
RN 183745-01-9 HCAPLUS
CN 3H-Indolium, 2-[2-[3-[(1,3-dihydro-1,3,3,5-tetramethyl-2H-indol-2-ylidene)ethylidene]-2-(diphenylamino)-1-cyclopenten-1-yl]ethenyl]-1,3,3,5-tetramethyl-, tetrafluoroborate(1-) (9CI) (CA INDEX NAME)

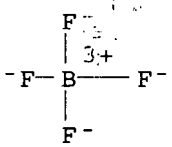
CM 1

CRN 183745-00-8
CMF C45 H48 N3



CM 2

CRN 14874-70-5
CMF B F4
CCI CCS



IC ICM G03C001-498
ICS G03C001-00; G03C001-035
CC 74-7 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
Section cross-reference(s): 41
IT **110992-87-5P**
(dye; heat-developable silver halide photosensitive material giving image without interference fringe)
IT **183745-01-9** 200863-72-5
(dye; heat-developable silver halide photosensitive material giving image without interference fringe)

L44 ANSWER 37 OF 43 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1997:602510 HCAPLUS
DOCUMENT NUMBER: 127:301317
TITLE: Heat development photosensitive material with improved lightfastness
INVENTOR(S): Harada, Toru; Fujiwara, Itsuo
PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 28 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 09230531	A	19970905	JP 1996-60376 <--	19960223
PRIORITY APPLN. INFO.:			JP 1996-60376 <--	19960223

ED Entered STN: 22 Sep 1997
GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB The title material contains a dye I (Z1, Z2 = nonmetal atoms required to form a 5 or 6- membered N-containing heterocycle which may be condensed; R1, R2 = alkyl, alkenyl, aralkyl; L = linking group composed of 5, 7 or 9 methine groups linked by conjugated double bonds; a, b, c = 0 or 1; X = anion, when X is an anion containing M in III shown below, the compound III, IV or V is not necessary) or II (R3-10 = H, alkyl, cycloalkyl, aryl, aralkyl, R3 and R4, R5 and R6, R7 and R8, R9 and R10, R4 and R5 or R8 and R9 may form a 5 or 6-membered ring), and ≥1 compound selected from Ln1Mm1 (III; L = ligand; M = Ni, Co, Cu, Pt, Pd, Fe, Mn, or Zn; n1 = 1-10; m1 = 1 or 2), IV (R11-14 = H or alkyl; X = anion), and V [R15 = H, halo, CONHR22, SO2NHR22, NHSO2R22, NHCOR22, NHCONHR22 (R22 = alkyl or aryl); R16, R17 = H,

alkyl, halo, NHCOR22, NHSO2R22, nonmetal atoms which link each other to form an aromatic ring; R18, R19 = H, alkyl, alkoxy, OH, halo; R20, R21 = alkyl, aralkyl, atoms linking to form a heterocycle; n2 = 0-2]. The material may be used in IR laser exposure. The dyes, which remains after heat-development, shows good lightfastness, and the material gives clear images with high sharpness. Thus, a PET film was coated with an antihalation layer containing the dye and the decoloration-preventing agent on the back side, and coated with a photosensitive emulsion layer and a protective layer successively on the front side to give a heat development photosensitive film.

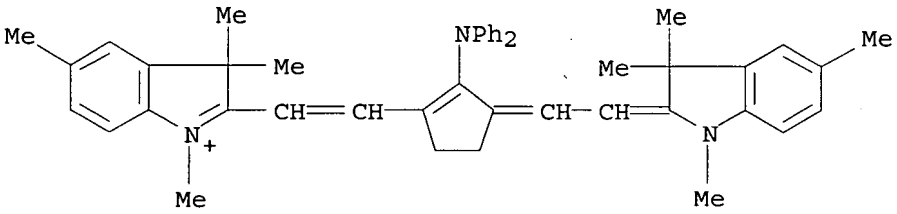
IT **197087-00-6**
(heat-developable photosensitive material containing cyanine or squarylium IR-absorbing dye and decoloration-preventing agent)

RN 197087-00-6 HCAPLUS

CN 3H-Indolium, 2-[2-[3-[(1,3-dihydro-1,3,3,5-tetramethyl-2H-indol-2-ylidene)ethylidene]-2-(diphenylamino)-1-cyclopenten-1-yl]ethenyl]-1,3,3,5-tetramethyl-, perchlorate (9CI) (CA INDEX NAME)

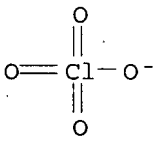
CM 1

CRN 183745-00-8
CMF C45 H48 N3



CM 2

CRN 14797-73-0
CMF Cl O4



IC ICM G03C001-498
ICS G03C001-00; G03C001-22

CC 74-7 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

IT 161375-44-6 **197087-00-6** 197087-01-7 197087-02-8
(heat-developable photosensitive material containing cyanine or squarylium IR-absorbing dye and decoloration-preventing agent)

L44 ANSWER 38 OF 43 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1997:383578 HCAPLUS
DOCUMENT NUMBER: 127:25892
TITLE: Silver halide photographic material containing

infrared absorbing dye and image formation using it

INVENTOR(S): Harada, Toru; Yabuki, Yoshiharu; Suzuki, Keiichi; Wariishi, Koji; Ono, Shigeru

PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 45 pp.
CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

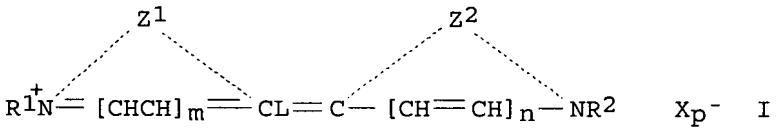
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 09096891	A	19970408	JP 1995-269097 <--	19950922
JP 3616173	B2	20050202		
US 5853969	A	19981229	US 1997-980304 <--	19971128

PRIORITY APPLN. INFO.:

JP 1994-227983 <--	A	19940922
JP 1994-279297 <--	A	19941114
JP 1995-207406 <--	A	19950724
JP 1995-208569 <--	A	19950725
US 1995-532880 <--	A3	19950922

ED Entered STN: 19 Jun 1997

GI



I

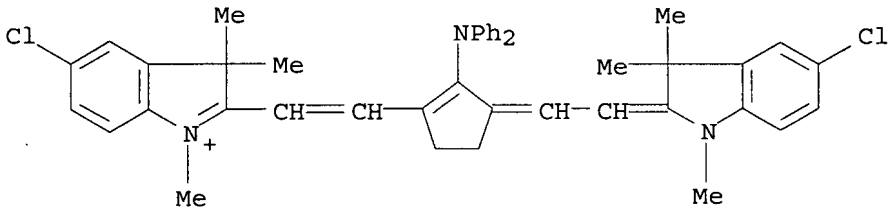
AB In the title material comprising a support coated with ≥1 Ag halide emulsion layer and ≥1 nonphotosensitive hydrophilic colloid layer and containing a dye having an absorption maximum wavelength in the IR region of 700-1100 nm in the emulsion or colloid layer, the dye is dispersed in the layer in a state of solid fine particles that are not removed by processing solns. The dye may be a cyanine dye I (Z1, Z2 = nonmetal atoms to form a 5- or 6- membered N-containing heterocycle which may be condensed; R1, R2 = alkyl, alkenyl, aralkyl; L = linking group in which 5, 7 or 9 methine groups link so that the double bonds are conjugated; m, n, p = 0, 1; X = anion) or a lake cyanine dye DAm.Yn (D = skeleton of cyanine dye I; A = anionic dissociation group linking to D as substituents; Y = cation; m = 2-5; n = 1-5). The title process comprises the steps of: imagewise exposing the material; detecting the insertion of the exposed material into an automatic processor by means of an IR ray detector; and operating the processor by the signal from the detector to process the material. The film is detected by IR ray without increasing the amount of the replenisher.

IT **110992-87-5P**
(photog. film containing solid-dispersed IR-absorbing dye)

RN 110992-87-5 HCAPLUS
CN 3H-Indolium, 5-chloro-2-[2-[3-[(5-chloro-1,3-dihydro-1,3,3-trimethyl-2H-indol-2-ylidene)ethylidene]-2-(diphenylamino)-1-cyclopenten-1-yl]ethenyl]-1,3,3-trimethyl-, tetrafluoroborate(1-) (9CI) (CA INDEX NAME)

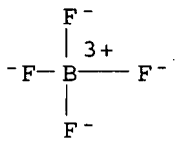
CM 1

CRN 110992-86-4
CMF C43 H42 Cl2 N3



CM 2

CRN 14874-70-5
CMF B F4
CCI CCS



IC ICM G03C001-40
ICS G03C005-29; G03D003-00
CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
IT **110992-87-5P** 177167-90-7P 177167-94-1P 177168-07-9P 177168-08-0P 186799-79-1P 190077-07-7P
(photog. film containing solid-dispersed IR-absorbing dye)

L44 ANSWER 39 OF 43 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1996:724227 HCAPLUS
DOCUMENT NUMBER: 125:331559
TITLE: Solid particle dispersions of cyanine compounds with long-wave absorbance
INVENTOR(S): Harada, Tooru; Yabuki, Yoshiharu
PATENT ASSIGNEE(S): Fuji Photo Film Co Ltd, Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 10 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

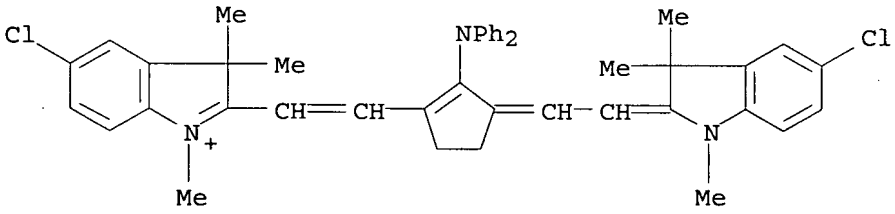
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE

JP 08245902	A	19960924	JP 1995-54026 <--	19950314
PRIORITY APPLN. INFO.:			JP 1995-54026 <--	19950314

OTHER SOURCE(S): MARPAT 125:331559
ED Entered STN: 11 Dec 1996
AB The title dispersions have absorbance at a wave length which is at least 50 nm longer than the wave length at which the solns. of the cyanine compds. have the maximum absorbance. The cyanine compound dispersions are especially useful as dye for photosensitive material, which can be used in normal light and be recognized by a sensor. A cyanine compound prepared from 1,2,3,3-tetramethyl-5-chloroindolenium p-toluenesulfonate and N-(2,5-dianilinomethylenecyclopentylidene)-diphenylammonium perchlorate had λmax 800.8 nm in chloroform; a film formed from a dispersion of the compound in CM-cellulose and glass beads had λmax 910 nm.
IT **110992-87-5**
(solid particle dispersions of cyanine compds. with long-wave absorbance)
RN 110992-87-5 HCAPLUS
CN 3H-Indolium, 5-chloro-2-[2-[3-[(5-chloro-1,3-dihydro-1,3,3-trimethyl-2H-indol-2-ylidene)ethylidene]-2-(diphenylamino)-1-cyclopenten-1-yl]ethenyl]-1,3,3-trimethyl-, tetrafluoroborate(1-) (9CI) (CA INDEX NAME)

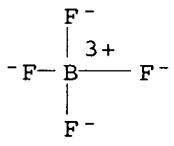
CM 1

CRN 110992-86-4
CMF C43 H42 Cl2 N3



CM 2

CRN 14874-70-5
CMF B F4
CCI CCS

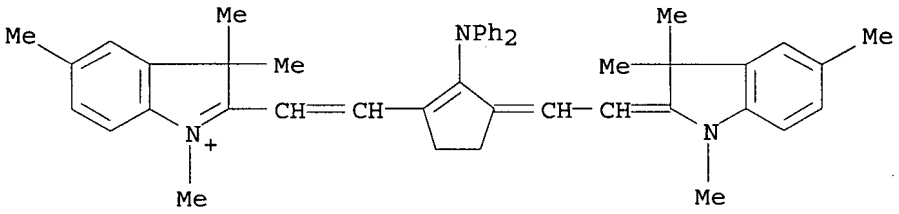


IT **183745-01-9**
(solid particle dispersions of cyanine compds. with long-wave absorbance)

RN 183745-01-9 HCAPLUS
CN 3H-Indolium, 2-[2-[3-[(1,3-dihydro-1,3,3,5-tetramethyl-2H-indol-2-ylidene)ethylidene]-2-(diphenylamino)-1-cyclopenten-1-yl]ethenyl]-1,3,3,5-tetramethyl-, tetrafluoroborate(1-) (9CI) (CA INDEX NAME)

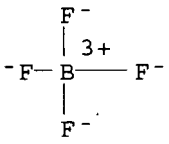
CM 1

CRN 183745-00-8
CMF C45 H48 N3



CM 2

CRN 14874-70-5
CMF B F4
CCI CCS



IC ICM C09B067-46
ICS G03C001-83
ICA C09B023-00
CC 41-11 (Dyes, Organic Pigments, Fluorescent Brighteners, and Photographic Sensitizers)
Section cross-reference(s): 74
IT **110992-87-5**
(solid particle dispersions of cyanine compds. with long-wave absorbance)
IT 177167-98-5 177168-00-2 **183745-01-9** 183745-04-2
183745-07-5 183745-10-0 183745-11-1 183745-13-3 183745-15-5
183745-17-7 183745-18-8 183745-19-9 183745-21-3 183745-23-5
183745-24-6 183745-27-9 183745-30-4 183745-33-7 183745-35-9
183745-36-0 183745-38-2 183745-40-6 183745-42-8 183745-44-0
183745-45-1 183745-47-3 183745-49-5 183745-51-9 183745-53-1
183745-55-3 183745-57-5
(solid particle dispersions of cyanine compds. with long-wave absorbance)

L44 ANSWER 40 OF 43 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1996:332371 HCAPLUS
DOCUMENT NUMBER: 124:356143
TITLE: Silver halide photographic material containing infrared-absorbing colorant

INVENTOR(S): Harada, Toru; Suzuki, Keiichi; Ohno, Shigeru; Koji, Wariishi; Yabuki, Yoshiharu
PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan
SOURCE: Eur. Pat. Appl., 54 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

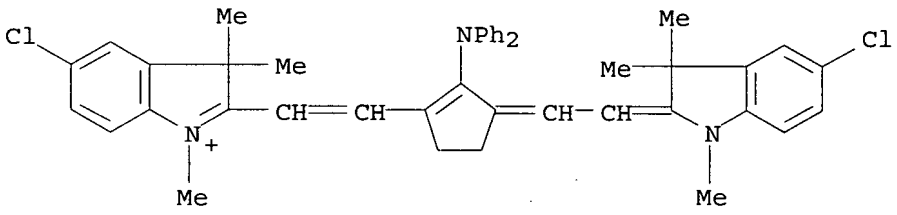
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 703494	A1	19960327	EP 1995-114966 <--	19950922
EP 703494	B1	20020508		
R: DE, FR, GB, NL				
US 5714307	A	19980203	US 1995-532880 <--	19950922
US 5853969	A	19981229	US 1997-980304 <--	19971128

PRIORITY APPLN. INFO.: JP 1994-227983 A 19940922 <--
US 1995-532880 A3 19950922 <--

OTHER SOURCE(S): MARPAT 124:356143
ED Entered STN: 07 Jun 1996
AB A silver halide photog. material comprises, on a support, at least one silver halide emulsion layer and at least one non-light-sensitive hydrophilic colloidal layer. A silver halide emulsion layer or a hydrophilic colloidal layer contains a colorant having the absorption maximum wavelength within the IR region of 700 to 1100 nm. The colorant is in the form of solid particles dispersed in the silver halide emulsion layer or in the hydrophilic colloidal layer. The solid particles cannot substantially be removed by a processing solution of the silver halide photog. material. An image-forming process employing the silver halide photog. material is also disclosed.
IT **110992-87-5P**
(preparation and use as IR-absorbing dye for silver halide photog. materials)
RN 110992-87-5 HCAPLUS
CN 3H-Indolium, 5-chloro-2-[2-[3-[(5-chloro-1,3-dihydro-1,3,3-trimethyl-2H-indol-2-ylidene)ethylidene]-2-(diphenylamino)-1-cyclopenten-1-yl]ethenyl]-1,3,3-trimethyl-, tetrafluoroborate(1-) (9CI) (CA INDEX NAME)

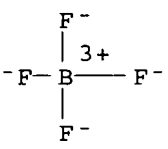
CM 1

CRN 110992-86-4
CMF C43 H42 Cl2 N3



CM 2

CRN 14874-70-5
CMF B F4
CCI CCS

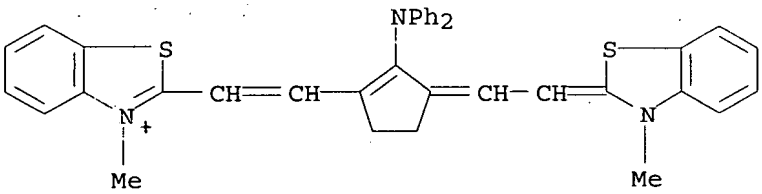


IC ICM G03C001-83
ICS G03C001-20
CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
IT **110992-87-5P** 177167-90-7P 177167-94-1P 177168-08-0P 177168-15-9P
(preparation and use as IR-absorbing dye for silver halide photog. materials)

L44 ANSWER 41 OF 43 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1992:593593 HCAPLUS
DOCUMENT NUMBER: 117:193593
TITLE: Synthesis of bridge chain heptamethine cyanine dyes and their spectroscopic properties
AUTHOR(S): Yao, Zuguang; Fang, Xi; Zhu, Zhenghua; Ye, Lin; Yang, Xiangchun
CORPORATE SOURCE: Res. Inst. Fine Chem., East China Univ. Chem. Technol., Shanghai, 200237, Peop. Rep. China
SOURCE: Gaodeng Xuexiao Huaxue Xuebao (**1992**), 13(2), 256-8
CODEN: KTHPDM; ISSN: 0251-0790
DOCUMENT TYPE: Journal
LANGUAGE: Chinese
ED Entered STN: 15 Nov 1992
AB The absorption and fluorescence emission spectra of 5 bridge-chain heptamethine cyanine dyes were determined Their laser tuning range, center laser wavelength, and conversion efficiency were examined with the frequency-doubled YAG laser as a pump source.
IT **139361-79-8**
(absorption and fluorescence emission spectra and laser properties of)
RN 139361-79-8 HCAPLUS
CN Benzothiazolium, 2-[2-[2-(diphenylamino)-3-[(3-methyl-2(3H)-benzothiazolylidene)ethylidene]-1-cyclopenten-1-yl]ethenyl]-3-methyl-, perchlorate (9CI) (CA INDEX NAME)

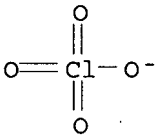
CM 1

CRN 139361-78-7
CMF C37 H32 N3 S2



CM 2

CRN 14797-73-0
CMF Cl O4

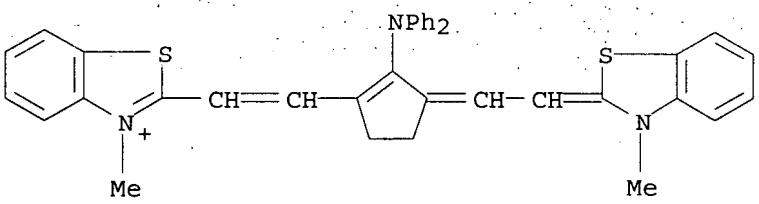


CC 41-6 (Dyes, Organic Pigments, Fluorescent Brighteners, and Photographic Sensitizers)
IT 26529-09-9 53655-17-7 55281-19-1 123104-68-7 **139361-79-8**
(absorption and fluorescence emission spectra and laser properties of)

L44 ANSWER 42 OF 43 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1992:108290 HCAPLUS
DOCUMENT NUMBER: 116:108290
TITLE: Study on tricarbocyanine dyes
AUTHOR(S): Yao, Zuguang; Fang, Xi; Zhao, Faxiang; Zhu, Zhenghua
CORPORATE SOURCE: Res. Inst. Fine Chem., East China Univ. Chem. Technol., Shanghai, 200237, Peop. Rep. China
SOURCE: Yingyong Huaxue (**1991**), 8(6), 82-4
CODEN: YIHUED; ISSN: 1000-0518
DOCUMENT TYPE: Journal
LANGUAGE: Chinese
ED Entered STN: 20 Mar 1992
AB Nine tricarbocyanine dyes containing a disubstituted amino group in the bridging chain were prepared and their absorption and IR sensitization spectra were given. The absorption wavelength of dyes containing Se, S, and O hetero atoms was 809.4, 803.6, and 734.4 nm, resp.
IT **139361-79-8P**
(dyes, preparation and absorption and IR sensitization spectra of)
RN 139361-79-8 HCAPLUS
CN Benzothiazolium, 2-[2-[2-(diphenylamino)-3-[(3-methyl-2(3H)-benzothiazolylidene)ethylidene]-1-cyclopenten-1-yl]ethenyl]-3-methyl-, perchlorate (9CI) (CA INDEX NAME)

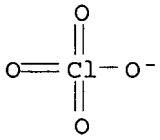
CM 1

CRN 139361-78-7
CMF C37 H32 N3 S2



CM 2

CRN 14797-73-0
CMF Cl O4



CC 41-11 (Dyes, Organic Pigments, Fluorescent Brighteners, and Photographic Sensitizers)
Section cross-reference(s): 74
IT 26529-09-9P 33675-88-6P 53655-17-7P 54849-67-1P 55281-19-1P 123104-68-7P 123129-54-4P 138966-26-4P **139361-79-8P**
(dyes, preparation and absorption and IR sensitization spectra of)

L44 ANSWER 43 OF 43 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1987:626046 HCAPLUS
DOCUMENT NUMBER: 107:226046
TITLE: Light-durable additives for indolenine laser recording medium and optical filters
INVENTOR(S): Sato, Giichi; Shindo, Shigeto; Numa, Tatsuya; Sumiya, Mitsukuni
PATENT ASSIGNEE(S): Nippon Kayaku Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 7 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 62050187	A	19870304	JP 1985-188516 <--	19850829
JP 04065796	B	19921021		

PRIORITY APPLN. INFO.: JP 1985-188516 <-- 19850829

ED Entered STN: 12 Dec 1987
GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB The light durability of the indolenine dye of the formula I is improved by adding ≥1 or ≥2 compds. of the formula II-IV (R = alkyl, alkoxyalkyl, alkoxy alkoxyalkyl; A = V, VI, VII; B = H, Cl, NPh2; R1 = alkyl; E = Ph, naphthyl). A composition containing the indolenine dye and the additives may be used to form a laser recording medium and an IR optical filter.

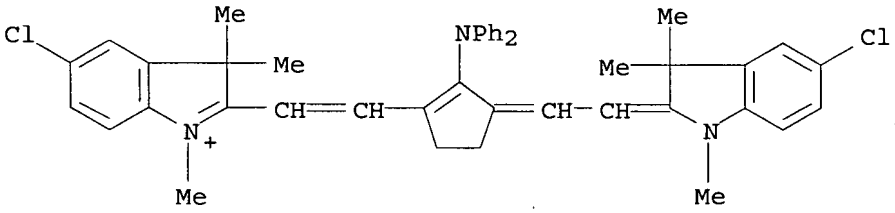
IT **110992-87-5**
(laser recording medium with recording layer of, containing light-durable additives, for improved light durability)

RN 110992-87-5 HCAPLUS

CN 3H-Indolium, 5-chloro-2-[2-[3-[(5-chloro-1,3-dihydro-1,3,3-trimethyl-2H-indol-2-ylidene)ethylidene]-2-(diphenylamino)-1-cyclopenten-1-yl]ethenyl]-1,3,3-trimethyl-, tetrafluoroborate(1-) (9CI) (CA INDEX NAME)

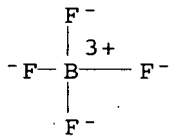
CM 1

CRN 110992-86-4
CMF C43 H42 Cl2 N3



CM 2

CRN 14874-70-5
CMF B F4
CCI CCS



IC ICM B41M005-26
ICS G11B007-24

CC 74-12 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

IT 102185-07-9 110009-45-5 110992-54-6 110992-55-7 110992-57-9
110992-58-0 110992-60-4 110992-62-6 110992-64-8 110992-66-0
110992-68-2 110992-70-6 110992-72-8 110992-73-9 110992-75-1
110992-77-3 110992-79-5 110992-81-9 110992-83-1 110992-85-3
110992-87-5 110992-88-6 110992-90-0 110992-92-2
110992-93-3 110992-95-5 110992-97-7 110992-99-9 111024-10-3
111024-12-5
(laser recording medium with recording layer of, containing light-durable additives, for improved light durability)

```
=> d que l43
L2             8 SEA FILE=REGISTRY ABB=ON  PLU=ON  (110992-87-5/BI OR
                 139361-79-8/BI OR 183745-01-9/BI OR 197087-00-6/BI OR
                 259133-57-8/BI OR 442548-17-6/BI OR 442548-19-8/BI OR
                 869557-67-5/BI)
L3               SCR 2043
L5               SCR 1841 AND 1993 AND 2040
L9               STR

 Hy~~~~ G1~~~~ Hy        Ak~ Cb~ Ak        Ak~ O~ Ak          Ak @10    A @14
  1      2      3         @4   5   @6        @7   8   @9


 Ak~ G2~ Ak
@11  12  @13


VAR G1=10/4-1 6-3/7-1 9-3/11-1 13-3
REP G2=(1-10) 14
NODE ATTRIBUTES:
NSPEC   IS RC     AT  14
DEFAULT MLEVEL IS ATOM
GGCAT   IS PCY  UNS  AT   1
GGCAT   IS PCY  UNS  AT   3
GGCAT   IS UNS  AT   4
GGCAT   IS UNS  AT   6
GGCAT   IS UNS  AT   7
GGCAT   IS UNS  AT   9
GGCAT   IS UNS  AT  10
GGCAT   IS UNS  AT  11
GGCAT   IS UNS  AT  13
DEFAULT ECLEVEL IS LIMITED
ECOUNT  IS M1 N  M0-X1 O  M0-X1 S  M0-X1 Se  AT   1
ECOUNT  IS M1 N  M0-X1 O  M0-X1 S  M0-X1 Se  AT   3

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS  14

STEREO ATTRIBUTES: NONE
L12          164 SEA FILE=REGISTRY SSS FUL L9 AND L3 AND L5
L17              SCR 1993 AND 2040
L22              STR

Hy~~~~ G1~~~~ Hy        Ak~ Cb~ Ak        Ak @10
 1      2      3         @4   5   @6


VAR G1=10/4-1 6-3
NODE ATTRIBUTES:
DEFAULT MLEVEL IS ATOM
GGCAT   IS PCY  UNS  AT   1
GGCAT   IS PCY  UNS  AT   3
DEFAULT ECLEVEL IS LIMITED
ECOUNT  IS M1 N  M0-X1 O  M0-X1 S  M0-X1 Se  AT   1
ECOUNT  IS M1 N  M0-X1 O  M0-X1 S  M0-X1 Se  AT   3
ECOUNT  IS M5 C  AT  10

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
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NUMBER OF NODES IS   7

STEREO ATTRIBUTES: NONE
L25          210 SEA FILE=REGISTRY SSS FUL L22 AND L3 AND L17
L29          259 SEA FILE=REGISTRY ABB=ON  PLU=ON  L12 OR L25
L30           96 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L29
L31           58 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L2
L32          154 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L30 OR L31
L33          135 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L32 AND (1840-2003)/PRY,AY
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L34        12620 SEA FILE=HCAPLUS ABB=ON  PLU=ON  "LITHOGRAPHIC PLATES"+PFT,
                 NT/CT
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L36       175232 SEA FILE=HCAPLUS ABB=ON  PLU=ON  "OPTICAL MATERIALS"+PFT,NT
                 /CT
L37           47 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L33 AND (L34 OR L35 OR
                 L36)
L38           16 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L37 NOT L31
L40          134 SEA FILE=HCAPLUS ABB=ON  PLU=ON  MITSUMOTO, T?/AU
L41         2095 SEA FILE=HCAPLUS ABB=ON  PLU=ON  NAKAMURA, I?/AU
L42            6 SEA FILE=HCAPLUS ABB=ON  PLU=ON  (L40 OR L41) AND L32
L43           16 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L38 NOT L42


=> d l43 1-16 ibib ed abs hitstr hitind

L43  ANSWER 1 OF 16  HCAPLUS  COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER:         2005:259933  HCAPLUS
DOCUMENT NUMBER:          142:332395
TITLE:                    Molecule arrays and method for preparation
                          including the binding to functional groups
INVENTOR(S):              Howorka, Stefan; Pammer, Patrick
PATENT ASSIGNEE(S):       Upper Austrian Research GmbH, Austria
SOURCE:                   PCT Int. Appl., 81 pp.
                          CODEN: PIXXD2
DOCUMENT TYPE:            Patent
LANGUAGE:                 German
FAMILY ACC. NUM. COUNT:   1
PATENT INFORMATION:

     PATENT NO.           KIND   DATE        APPLICATION NO.          DATE
     ---------------      ----   --------    --------------------     --------
     WO 2005025737         A2    20050324    WO 2004-AT316            20040916
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     WO 2005025737         A3    20050818
         W:  AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA,
             CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI,
             GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP,
             KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW,
             MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD,
             SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ,
             VC, VN, YU, ZA, ZM, ZW
         RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW,
             AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ,
             DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL,
             PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ,
             GW, ML, MR, NE, SN, TD, TG
     AT 2003001455         A     20051115    AT 2003-1455             20030916
                                                          <--
     AT 414047             B     20060815
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AT 501110	A1	20060615	AT 2004-389 <--	20040305
EP 1663473	A2	20060607	EP 2004-761038 <--	20040916

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK

PRIORITY APPLN. INFO.:	AT 2003-1455 <--	A	20030916
	AT 2004-389	A	20040305
	WO 2004-AT316	W	20040916

ED Entered STN: 25 Mar 2005

AB The invention relates to assemblies for bonding mols. comprising bondable functional groups, which are present on a solid supporting material as individual mol. functional groups or multiple identical functional groups. Said assemblies are characterized in that the d. of the individual functional groups or multiple functional groups on the solid supporting material is between 104 and 1010 individual or multiple functional groups per cm2 and that there are no addnl. bondable functional groups within a selected distance d from any individual bondable functional group or multiple functional group for at least 95 % and in particular at least 99 % of the individual or multiple functional groups.

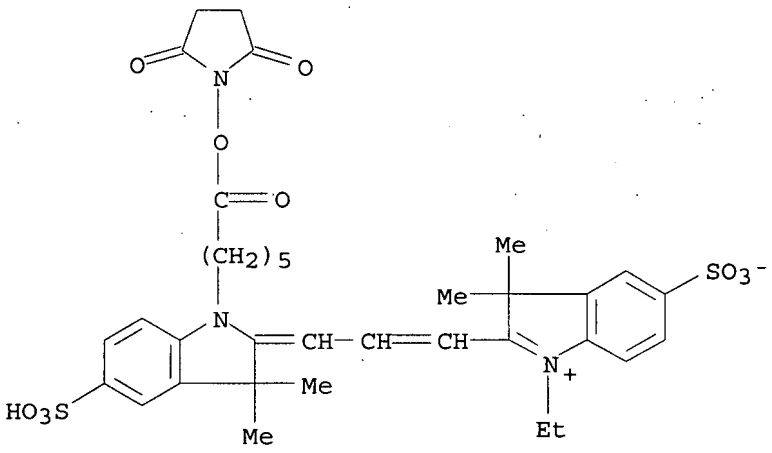
IT **848236-00-0P**
(mol. arrays and method for preparation including the binding to functional groups)

RN 848236-00-0 HCAPLUS

CN 3H-Indolium, 2-[3-[1-[6-[(2,5-dioxo-1-pyrrolidinyl)oxy]-6-oxohexyl]-1,3-dihydro-3,3-dimethyl-5-sulfo-2H-indol-2-ylidene]-1-propenyl]-1-ethyl-3,3-dimethyl-5-sulfo-, inner salt, polymer with α-(2-aminoethyl)-ω-(2-aminoethoxy)poly(oxy-1,2-ethanediyl) (9CI) (CA INDEX NAME)

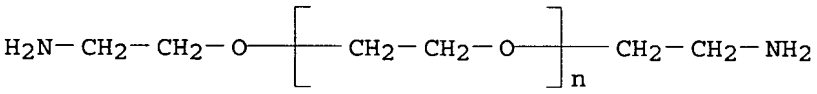
CM 1

CRN 146368-16-3
CMF C35 H41 N3 O10 S2



CM 2

CRN 24991-53-5
CMF (C2 H4 O)n C4 H12 N2 O
CCI PMS



IC ICM B01J019-00
ICS C12Q001-68
CC 9-1 (Biochemical Methods)
Section cross-reference(s): 3
IT Atomic force microscopy
Chemisorption
Combinatorial library
DNA microarray technology
Electron beam lithography
Fluorescent substances
Functional groups
Immobilization, molecular or cellular
Ion beam lithography
Membranes, nonbiological
Microarray technology
Molecular recognition
Nanoparticles
Protein microarray technology
Scanning tunneling microscopy
Size-exclusion chromatography
(mol. arrays and method for preparation including the binding to functional groups)
IT **848236-00-0P**
(mol. arrays and method for preparation including the binding to functional groups)

L43 ANSWER 2 OF 16 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2005:239208 HCAPLUS
DOCUMENT NUMBER: 142:311998
TITLE: Assaying transferase activity by using an artificial, multifunctional substrate comprising a small-molecule component linked to biopolymer-substrate-mimetic component
INVENTOR(S): Gellibolian, Robert; Rouhani, Riaz
PATENT ASSIGNEE(S): USA
SOURCE: PCT Int. Appl., 66 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005024380	A2	20050317	WO 2004-US29004	20040903
WO 2005024380	A3	20050526		
WO 2005024380	A9	20050707		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA,

CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI,
GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP,
KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW,
MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD,
SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ,
VC, VN, YU, ZA, ZM, ZW
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW,
AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ,
DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL,
PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ,
GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: US 2003-499863P P 20030903

<--

OTHER SOURCE(S): MARPAT 142:311998

ED Entered STN: 18 Mar 2005

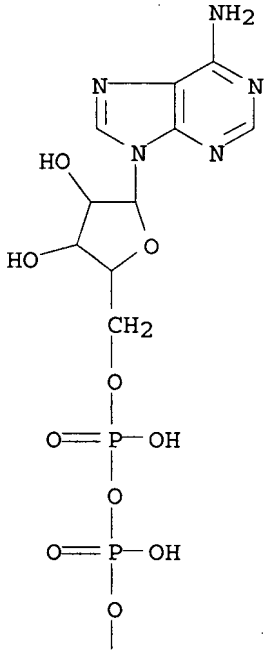
AB Embodiments of the present invention are directed to sensitive, specific, and com. feasible assays for transferase activity. Various embodiments of the present invention include artificial, multifunctional substrates specific for particular transferases that are chemical altered by the transferases to produce easily detectable, modified, multifunctional substrates. In one class of embodiments, the artificial, multifunctional substrate comprises a small-mol.-substrate component, or small-mol.-substrate-analog component, linked by a linking component to a biopolymer-substrate-mimetic or biopolymer-substrate-analog component. At least two, generally well-separated reporter moieties are included in the artificial, multifunctional substrate. The transferase, for which the artificial, multifunctional substrate is designed to serve as an assay reagent, catalyzes a generally covalent modification of the artificial, multifunctional substrate to produce a modified, artificial, multifunctional substrate reaction product in which the two reporter moieties are closely positioned to one another. When closely positioned to one another, the reporter moieties are detectable by one of various instrumental techniques. The artificial, multifunctional substrates for assaying protein kinase A, PCAF histone acetyltransferase, and protein arginine methyltransferase PRMT-1 are prepared

IT **848053-34-9P**
(protein kinase A substrate; transferase determination using artificial, multifunctional substrate comprising small-mol. component linked to biopolymer-substrate-mimetic component)

RN 848053-34-9 HCAPLUS

CN Poly(oxy-1,2-ethanediyl), α-hydro-ω-hydroxy-, 2-ether with N-acetyl-S-[9-(5'-adenylyloxy)-7,9-dihydroxy-7,9-dioxido-2-oxo-6,8-dioxa-3-aza-7,9-diphosphanon-1-yl]-L-cysteinyl-N6-[6-[2-[5-(1-ethyl-1,3-dihydro-3,3-dimethyl-5-sulfo-2H-indol-2-ylidene)-1,3-pentadienyl]-3,3-dimethyl-5-sulfo-3H-indolio]-1-oxohexyl]-N-(2-hydroxyethyl)-L-lysinamide inner salt, 8'-ether with N-acetyl-L-leucyl-L-arginyl-L-arginyl-L-alanyl-L-seryl-L-leucylglycyl-S-[2-[2-(3-hydroxy-1-oxopropyl)hydrazino]-2-oxoethyl]-L-cysteinyl-N6-[[6,7,7a,8a,9,10,16,18-octahydro-16,16,18,18-tetramethyl-14-sulfopyrano[3'',2'':3,4;5'',6'':3',4']dipyrido[1,2-a:1',2'-a']diindol-5-ium-2-yl]acetyl]-L-lysine inner salt (9CI) (CA INDEX NAME)

PAGE 1-A



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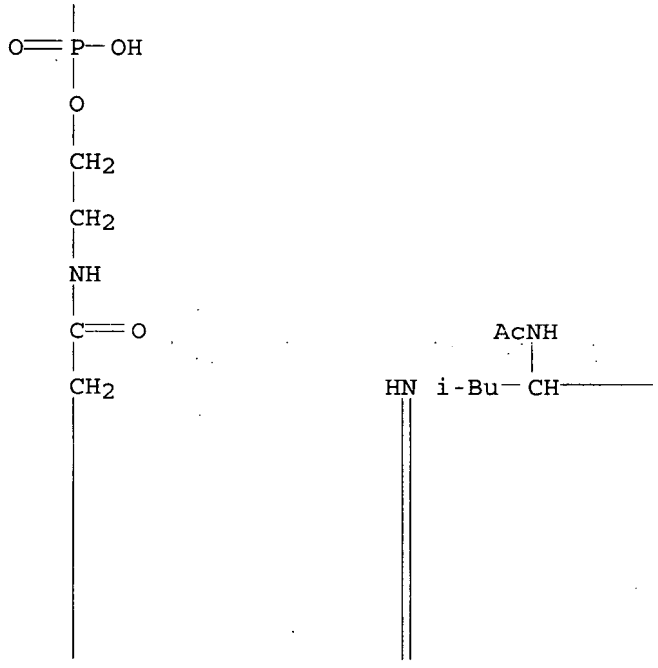

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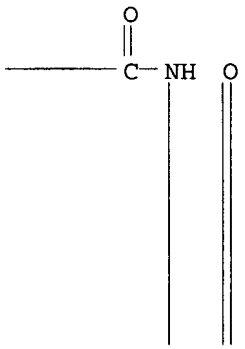
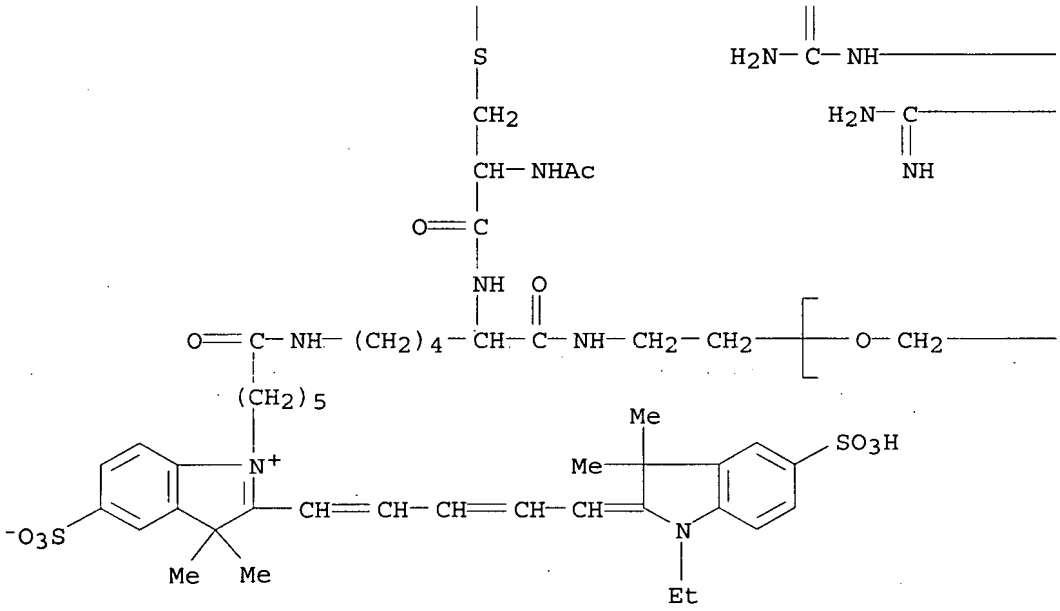


PAGE 3-A



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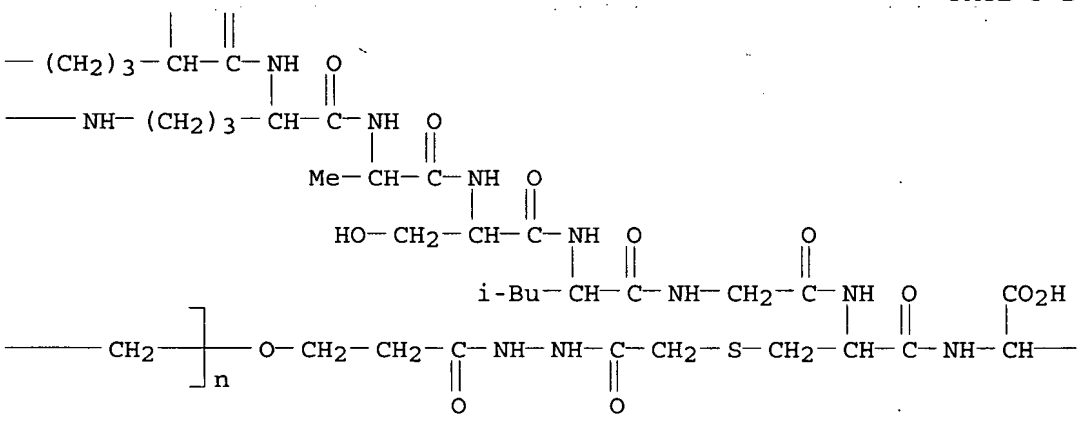

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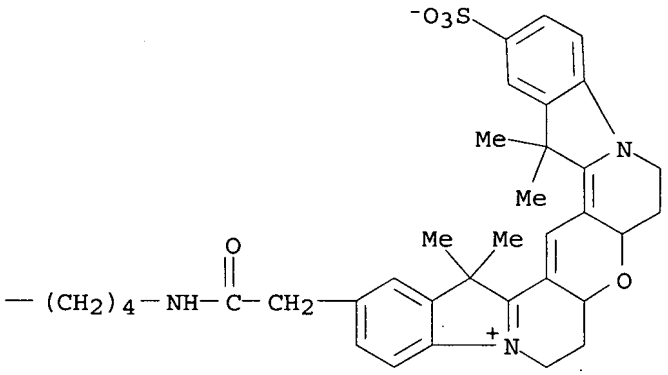


IC ICM G01N
CC 7-1 (Enzymes)
IT Chromophores
Fluorescent dyes
Fluorescent substances
(reporter moiety; transferase determination using artificial, multifunctional substrate comprising small-mol. component linked to biopolymer-substrate-mimetic component)
IT **848053-34-9P**
(protein kinase A substrate; transferase determination using artificial, multifunctional substrate comprising small-mol. component linked to biopolymer-substrate-mimetic component)

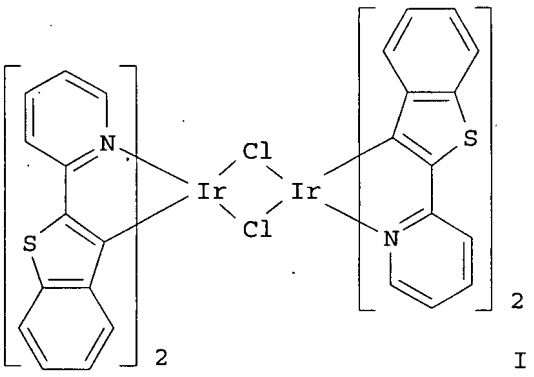
L43 ANSWER 3 OF 16 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2004:1127141 HCAPLUS
DOCUMENT NUMBER: 142:75006
TITLE: Electroluminescent conjugated polymers containing phosphorescent moieties and the application thereof in LED
INVENTOR(S): Chen, Show-An; Chen, Xiwen; Liao, Jin-Long; Liang, Yongmin; Chen, Yen-Chun

PATENT ASSIGNEE(S): National Tsing Hua University, Taiwan
SOURCE: U.S. Pat. Appl. Publ., 25 pp.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2004260047	A1	20041223	US 2003-735693 <--	20031216
US 7098295	B2	20060829		
US 2006217527	A1	20060928	US 2006-440102 <--	20060525

PRIORITY APPLN. INFO.: TW 2003-92116457 A 20030617 <--
US 2003-735693 A3 20031216 <--

ED Entered STN: 24 Dec 2004
GI



I

AB This invention provides electroluminescent conjugated polymers grafted with highly efficient phosphorescent organometallic complexes (such as iridium, platinum, osmium, rubidium, etc.) and charge transport moieties (such as oxadiazole, thiadiazole, triazole, pyridine, pyrimidine, substituted or non-substituted tertiary arylamines, substituted or non-substituted quaternary arylammonium salts, substituted or non-substituted tertiary heterocyclic aromatic amines, substituted or non-substituted quaternary heterocyclic aromatic ammonium, etc.). The emissive polymers (fully conjugated or limited conjugating length) covering the full visible range can be prepared The polymeric light emitting diodes with these materials can be used as indicators, light source and display for cellular phones, digital camera, pager, portable computer, personal data acquisition (PDA), watch, hand-held video game, billboard, etc. A typical polymer complex was manufactured by reaction of Ir complex I with 9-(11,13-dioxotetradecyl)-2,7-dibromo-9-hexylfluorene 15 h in 2-ethoxyethanol in presence of Na2CO3 at reflux, and polymerization of the resulting intermediate with 9,9-di-n-octyl-2,7-dibromofluorene and 9,9-di-n-octylfluorene-2,7-bis(trimethylene boronate) 5 days at 85° in PhMe in the presence of Pd(PPh3)4,

K2CO3, and Aliquat 336 with endcapping by Ph dioxopropyleneboronate and tert-butylphenyl bromide.'

IT **811862-30-3P**
(electroluminescent conjugated polymers containing phosphorescent transition metal complex moieties for in LED)

RN 811862-30-3 HCAPLUS

CN Iridium, [14-(2,7-dibromo-9-hexyl-9H-fluoren-9-yl)-2,4-tetradecanedionato-κO,κO']bis[2-(2-pyridinyl-κN)benzo[b]thien-3-yl-κC]-, polymer with 9,9'-[(2,7-dibromo-9H-fluoren-9-ylidene)di-10,1-decanediyl]bis[9H-carbazole] (9CI) (CA INDEX NAME)

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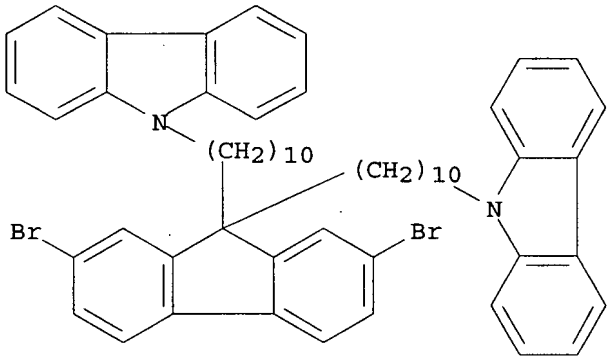
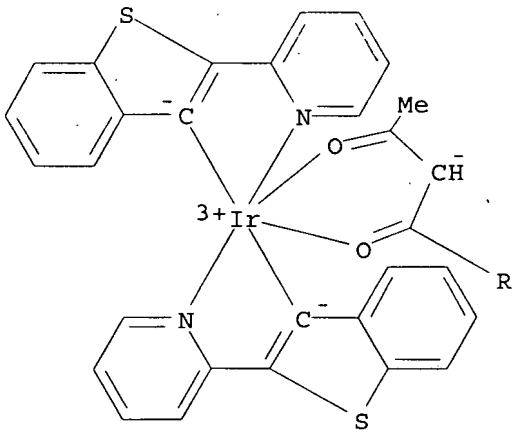
CRN 811862-27-8
CMF C57 H62 Br2 N2



CM 2

CRN 811862-25-6
CMF C59 H59 Br2 Ir N2 O2 S2
CCI CCS

PAGE 1-A



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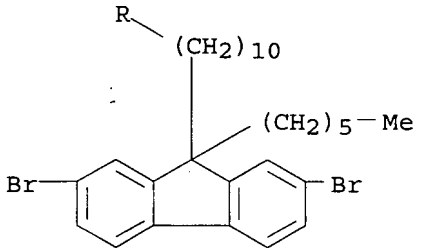


IC ICM C08G061-00
INCL 528004000; 528380000; 528423000; 528480000
CC 35-5 (Chemistry of Synthetic High Polymers)
Section cross-reference(s): 29, 74
IT Electroluminescent devices
Phosphorescent substances
(electroluminescent conjugated polymers containing phosphorescent transition metal complex moieties for in LED)
IT **Luminescent substances**
(electroluminescent; electroluminescent conjugated polymers containing phosphorescent transition metal complex moieties for in LED)
IT 98-98-6DP, Picolinic acid, transition metal complexes, conjugated polymer derivs. 289-95-2DP, Pyrimidine, transition metal complexes, conjugated polymer derivs. 541-50-4DP, Acetylacetic acid, transition metal complexes, conjugated polymer derivs. 603-34-9DP, Triphenylamine, transition metal complexes, conjugated polymer derivs. 7440-04-2DP, Osmium, conjugated polymer complexes 7440-06-4DP, Platinum, conjugated polymer complexes 7440-17-7DP, Rubidium, conjugated polymer complexes 11120-54-0DP, Oxadiazole, transition metal complexes, conjugated polymer derivs. 37306-44-8DP, Triazole, transition metal complexes, conjugated polymer derivs. 391604-55-0DP, transition metal complexes, conjugated polymer derivs. 811862-28-9P 811862-29-0P **811862-30-3P**
(electroluminescent conjugated polymers containing phosphorescent transition metal complex moieties for in LED)
REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L43 ANSWER 4 OF 16 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2004:513564 HCAPLUS
DOCUMENT NUMBER: 141:76739
TITLE: Hypercoiling polymers and their use in cellular delivery
INVENTOR(S): Slater, Nigel Kenneth Harry; Eccleston, Mark Edward
PATENT ASSIGNEE(S): Cambridge University Technical Services Limited, UK
SOURCE: PCT Int. Appl., 162 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004052402	A1	20040624	WO 2003-GB5262 <--	20031202
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
AU 2003290222	A1	20040630	AU 2003-290222 <--	20031202
EP 1567194	A1	20050831	EP 2003-782586 <--	20031202
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
US 2006172418	A1	20060803	US 2005-537543 <--	20050603
PRIORITY APPLN. INFO.:			GB 2002-28525 A <--	20021206
			WO 2003-GB5262 W <--	20031202

ED Entered STN: 25 Jun 2004

AB This invention pertains to certain hypercoiling polymers, and their use for the delivery of a payload into a living cell, e.g., into the nucleus of a living cell, which polymer incorporates, or is otherwise associated with, said payload. The payload may be, for example, a therapeutic payload, such as a drug; a diagnostic payload, e.g., a detectable label, such as a fluorophore, etc. In preferred embodiments, the hypercoiling polymers are biocompatible, biodegradable, comprise amide linkages, and/or are pseudo-proteins. The present invention also pertains to certain hypercoiling polymers; certain hypercoiling carrier polymers, which incorporate a payload; and certain hypercoiling carrier polymers, otherwise associated with a payload; which are suitable for use in such methods; and methods of diagnosis, treatment, imaging, etc., using such polymers. For example, doxorubicin (as a payload) covalently bonded to poly(L-lysine iso-phthalamide) (as carrier polymer) exhibited significant cytotoxic effects in human breast cancer (MCF7) and mitoxantrone-resistant (MCF7/MXR) cell lines in vitro.

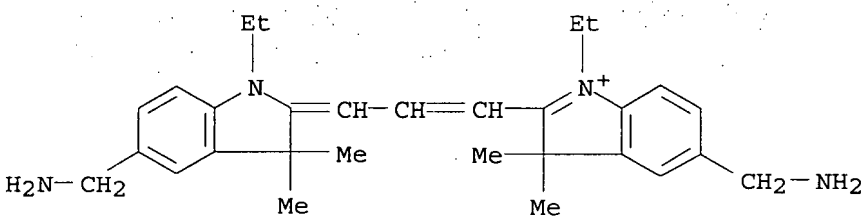
IT **666706-59-8P**
(hypercoiling polymers as carriers for cellular delivery)

RN 666706-59-8 HCAPLUS

CN L-Lysine, polymer with 5-(aminomethyl)-2-[3-[5-(aminomethyl)-1-ethyl-1,3-dihydro-3,3-dimethyl-2H-indol-2-ylidene]-1-propenyl]-1-ethyl-3,3-dimethyl-3H-indolium and 1,3-benzenedicarbonyl dichloride (9CI) (CA INDEX NAME)

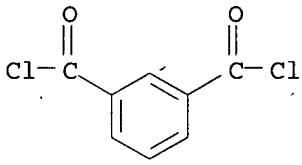
CM 1

CRN 666706-58-7
CMF C29 H39 N4



CM 2

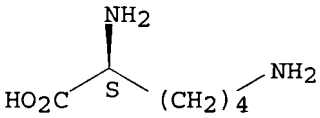
CRN 99-63-8
CMF C8 H4 Cl2 O2



CM 3

CRN 56-87-1
CMF C6 H14 N2 O2

Absolute stereochemistry.



IC ICM A61K047-34
ICS A61K047-42; A61K048-00
CC 63-6 (Pharmaceuticals)
Section cross-reference(s): 1, 35
IT Animal cell
Cell nucleus
Chemotherapy
Chromophores
Cyanine dyes
Cytotoxicity
Diagnostic agents
Drugs
Fluorescent substances
Human
Molecular weight
Phosphors
Plasmid vectors
Radiopharmaceuticals
(hypercoiling polymers as carriers for cellular delivery)
IT 254965-05-4P **666706-59-8P** 709653-51-0P 709653-52-1P
(hypercoiling polymers as carriers for cellular delivery)

L43 ANSWER 5 OF 16 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2004:249431 HCAPLUS
DOCUMENT NUMBER: 140:294809
TITLE: Storage-stable and high-sensitivity presensitized lithographic plates, manufacture of printing plates with good printing resistance by lasers, and printing method using them
INVENTOR(S): Makino, Naonori
PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 38 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

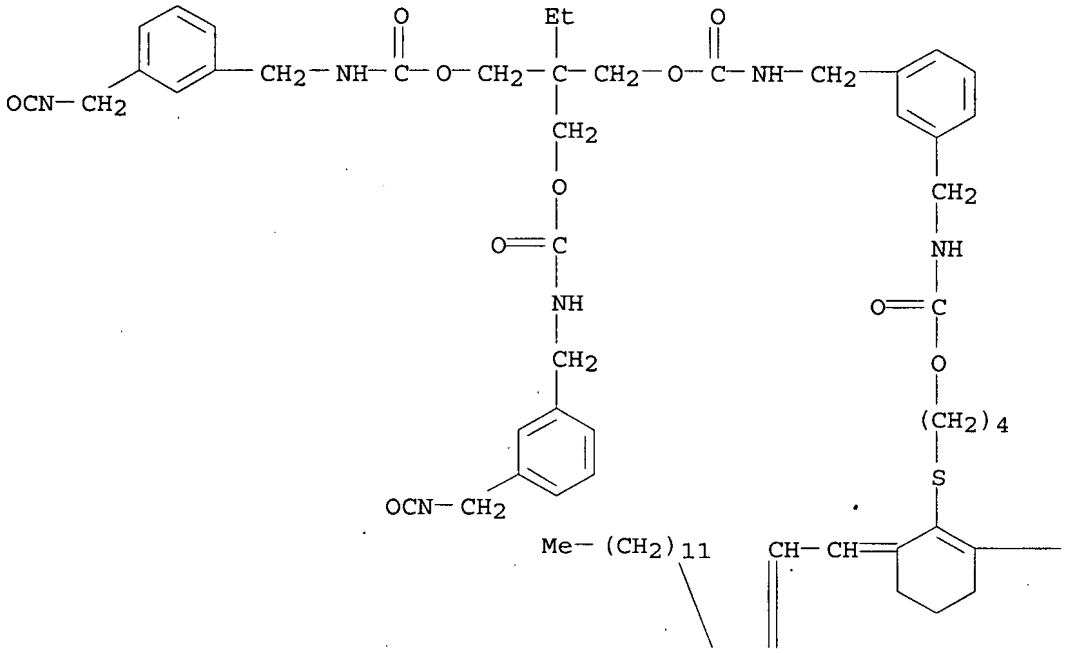
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2004090437	A	20040325	JP 2002-255219 <--	20020830
JP 3896396	B2	20070322		
PRIORITY APPLN. INFO.:			JP 2002-255219 <--	20020830

ED Entered STN: 26 Mar 2004
AB The presensitized plate, suitable for computer-to-plate (CTP) systems and on-machine development, has an imaging layer containing microcapsules, which comprise polymer shells and cores of polymerizable compds., wherein photothermal converting agents are dispersed in the polymer shells.
IT **675589-19-2P 675589-24-9P 675589-29-4P**
675589-30-7P 675589-31-8P 675589-32-9P
(microcapsule shell; storage-stable and high-sensitivity presensitized lithog. plates for CTP by lasers)
RN 675589-19-2 HCAPLUS
CN 1H-Benz[e]indolium, 3-dodecyl-2-[2-[3-[(3-dodecyl-1,3-dihydro-1,1-dimethyl-2H-benz[e]indol-2-ylidene)ethylidene]-2-[[4-[[[[[3-[6-ethyl-11-[3-(isocyanatomethyl)phenyl]-6-[[[[[[3-(isocyanatomethyl)phenyl]methyl]amino]carbonyl]oxy]methyl]-3,9-dioxo-4,8-dioxa-2,10-diazaundec-1-yl]phenyl]methyl]amino]carbonyl]oxy]butyl]thio]-1-cyclohexen-1-yl]ethenyl]-1,1-dimethyl-, salt with 4-methylbenzenesulfonic acid (1:1), homopolymer (9CI) (CA INDEX NAME)

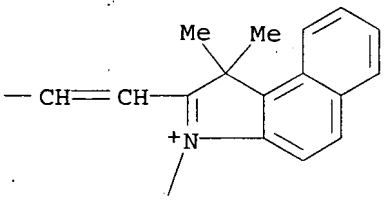
CM 1

CRN 675589-17-0
CMF C102 H131 N8 O10 S

PAGE 1-A



PAGE 1-B



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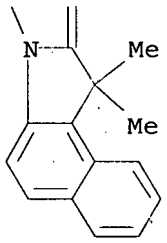

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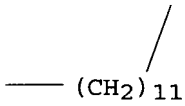

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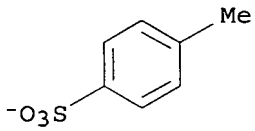
CRN 16722-51-3
CMF C7 H7 O3 S



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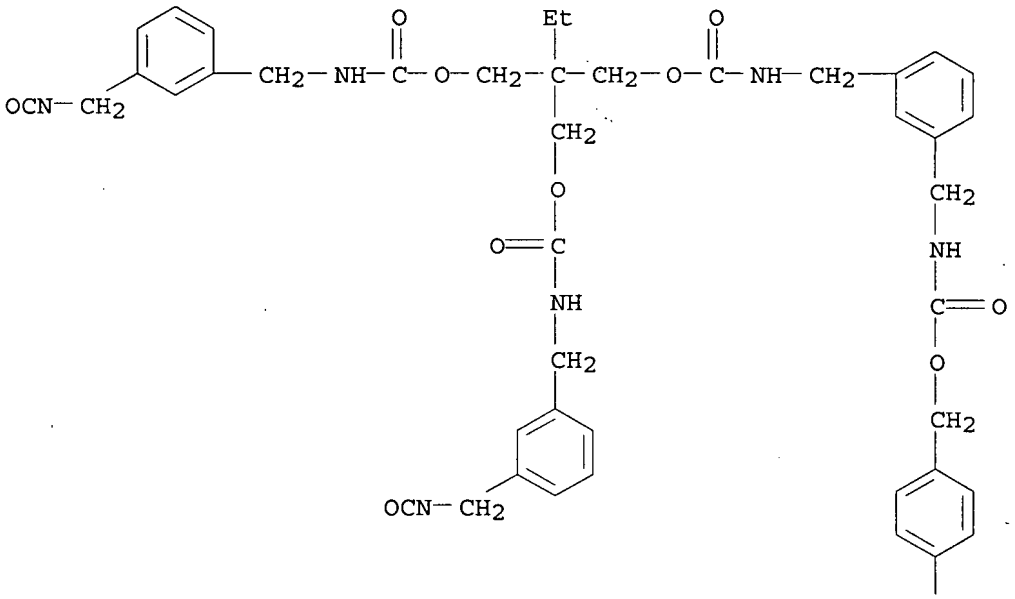
CM 1

CRN 675589-22-7
CMF C105 H129 N8 O10 S

PAGE 1-A



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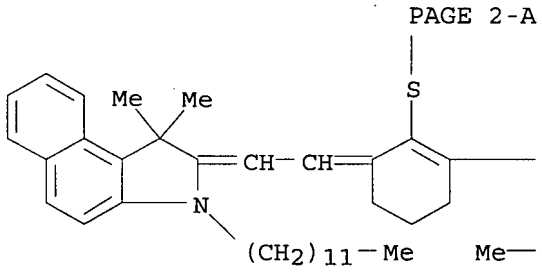

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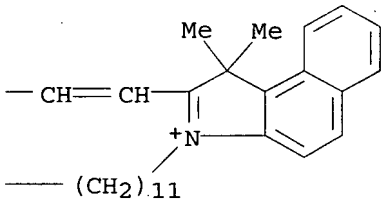

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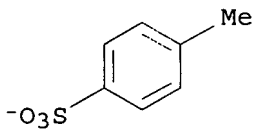

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CRN 675589-27-2
CMF C106 H132 N9 O10

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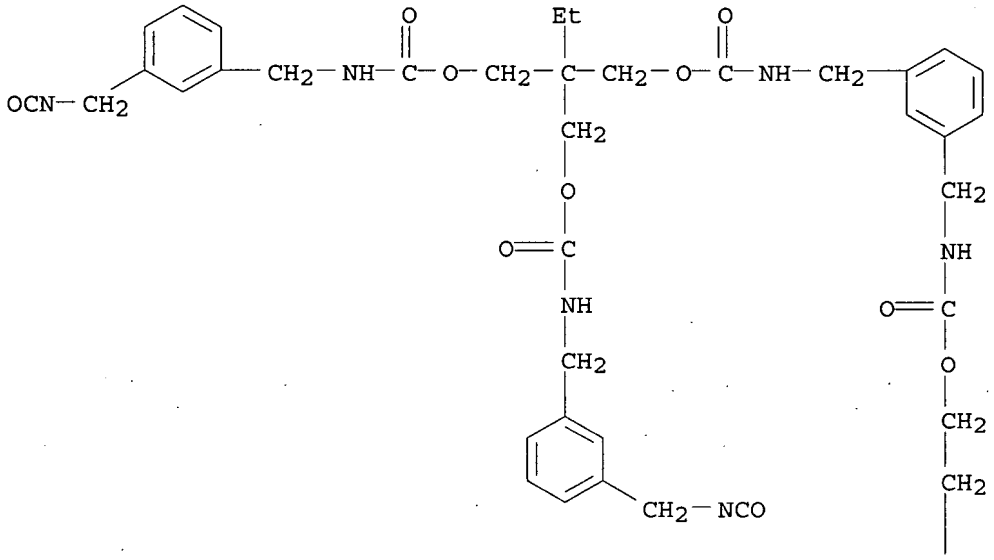

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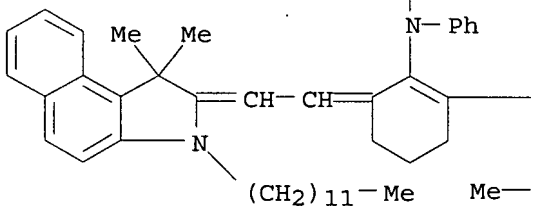

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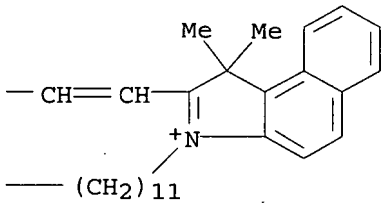

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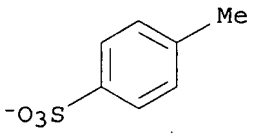

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CRN 9016-87-9
CMF Unspecified
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

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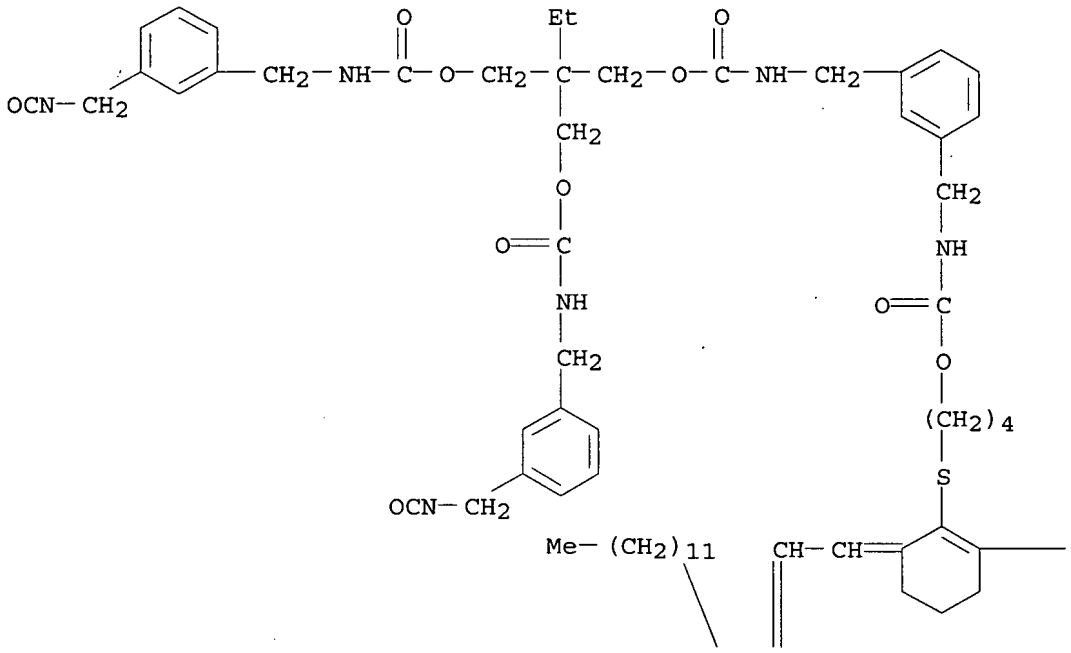
CRN 675589-18-1
CMF C102 H131 N8 O10 S . C7 H7 O3 S

CM 3

CRN 675589-17-0
CMF C102 H131 N8 O10 S

PAGE 1-A



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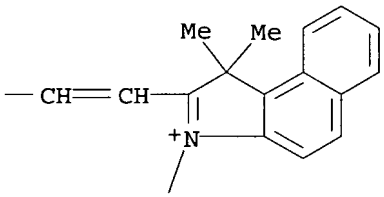

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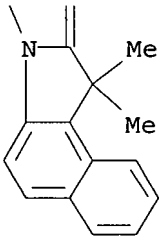

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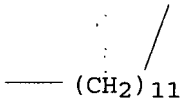

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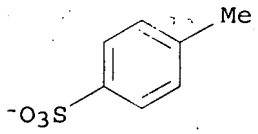
CRN 16722-51-3
CMF C7 H7 O3 S



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CM 1

CRN 9016-87-9
CMF Unspecified
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

CRN 675589-23-8
CMF C105 H129 N8 O10 S . C7 H7 O3 S

CM 3

CRN 675589-22-7
CMF C105 H129 N8 O10 S

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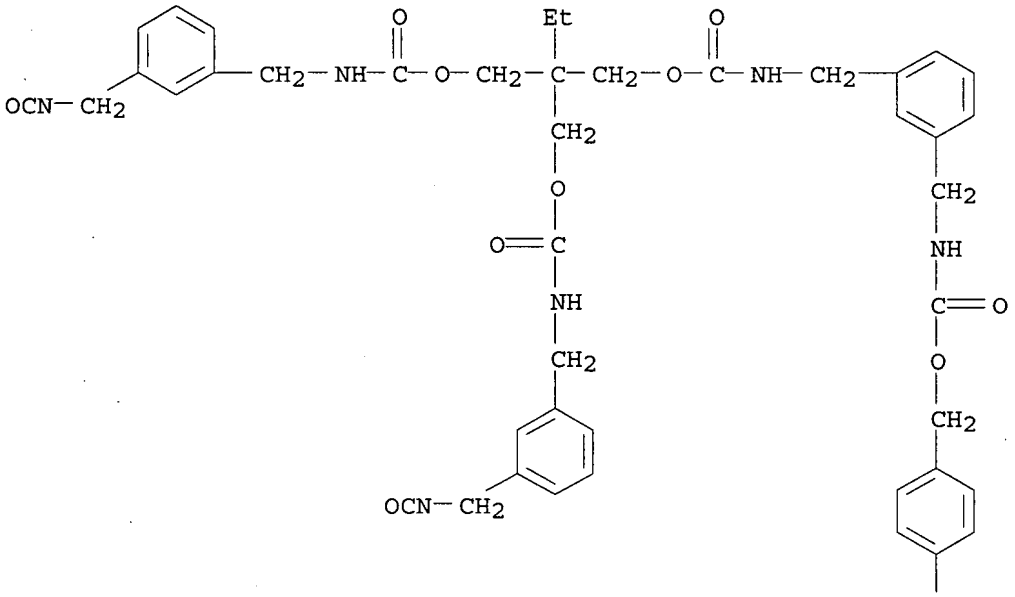

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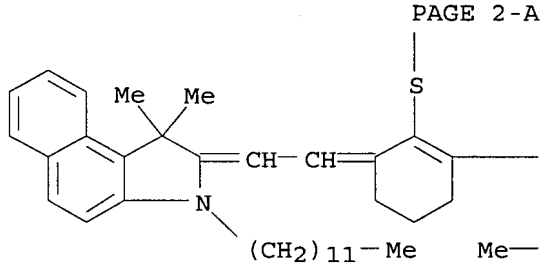

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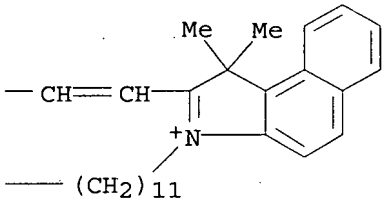

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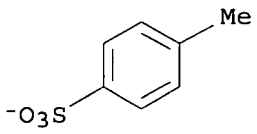
CRN 16722-51-3

CMF C7 H7 O3 S



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CM 1

CRN 9016-87-9
CMF Unspecified
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

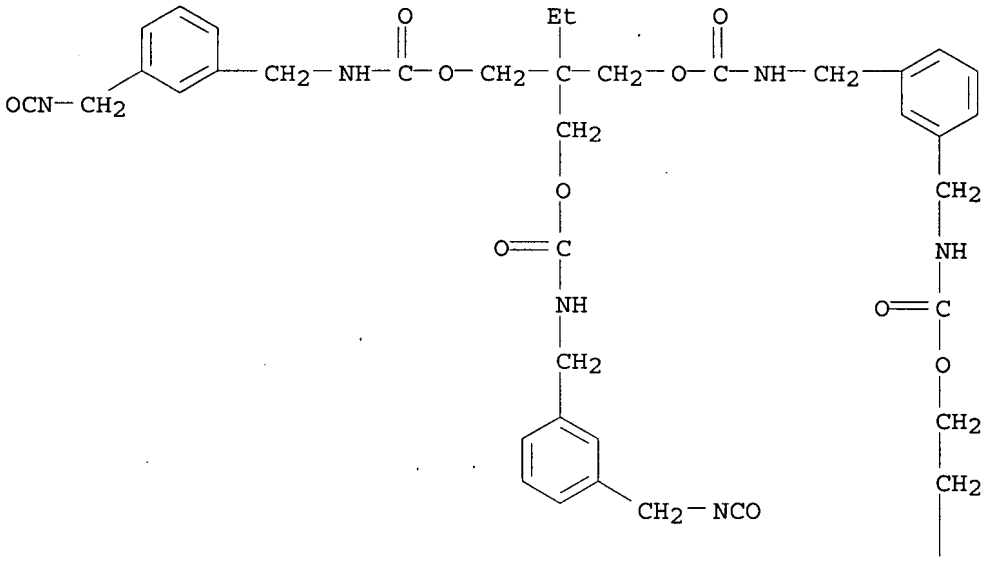
CM 2

CRN 675589-28-3
CMF C106 H132 N9 O10 . C7 H7 O3 S

CM 3

CRN 675589-27-2
CMF C106 H132 N9 O10

PAGE 1-A



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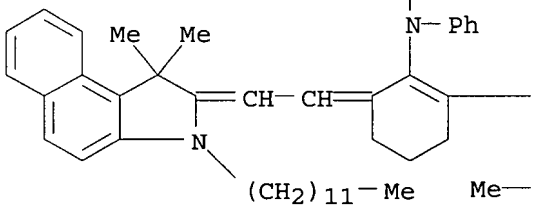

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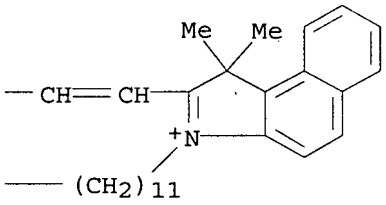

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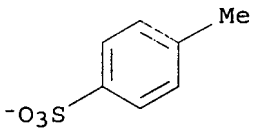
CRN 16722-51-3

MF C7 H7 O3 S



IC ICM B41N001-14
ICS B41C001-055; G03F007-00; G03F007-004
CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
IT **Lithographic plates**
(presensitized; storage-stable and high-sensitivity presensitized lithog. plates for CTP by lasers)
IT **Lithographic plates**
Lithography
Photoimaging materials
(storage-stable and high-sensitivity presensitized lithog. plates for CTP by lasers)
IT **675589-19-2P 675589-24-9P 675589-29-4P**
675589-30-7P 675589-31-8P 675589-32-9P
(microcapsule shell; storage-stable and high-sensitivity presensitized lithog. plates for CTP by lasers)

L43 ANSWER 6 OF 16 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2003:818436 HCAPLUS
DOCUMENT NUMBER: 139:323663
TITLE: Preparation of metal complexes containing carbazole derivatives for organic electroluminescent materials
INVENTOR(S): Kobayashi, Satoshi; Doi, Shuji; Mikami, Satoshi
PATENT ASSIGNEE(S): Sumitomo Chemical Company, Limited, Japan
SOURCE: PCT Int. Appl., 96 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003084973	A1	20031016	WO 2003-JP3494 <--	20030324
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RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
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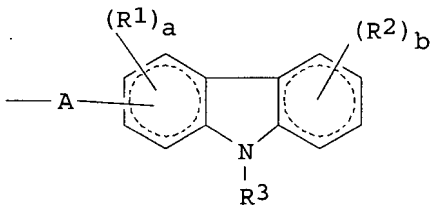
GB 2404380	A	20050202	GB 2004-23314	20030324

GB 2404380	B	20060823			
US 2005147843	A1	20050707	US 2003-508861 <--		20030324
JP 2004002344	A	20040108	JP 2003-84772 <--		20030326
JP 2004002755	A	20040108	JP 2003-84773 <--		20030326
PRIORITY APPLN. INFO.:			JP 2002-86173 <--	A	20020326
			JP 2002-86174 <--	A	20020326
			WO 2003-JP3494 <--	W	20030324

OTHER SOURCE(S): MARPAT 139:323663
ED Entered STN: 17 Oct 2003
GI



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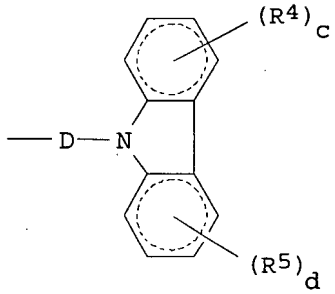

II

AB This patent relates to the preparation of metal complexes having a metal complex structure permitting luminescence from the triplet excited state and a monovalent group represented by the general formula (I) [wherein A is arylene or the like; R1 and R2 are each independently halogeno or the like; R3 is alkyl or the like; a is an integer of 0 to 3; and b is an integer of 0 to 4] or (II) [wherein D is arylene or the like; R4 and R5 are each independently halogen or the like; and c and d are each an integer of 0 to 4]; and luminescent devices made by using the same. The metal complexes are superior to luminescent materials of the prior art in luminous efficiency and can form luminescent layers by coating. Thus, an iridium complex polymer prepared from a composition comprising 9,9-dioctyl-2,7-dibromofluorene, bis(2-phenylpyridine)[2-(bromophenyl)pyridine]iridium(III), tris[2-(bromophenyl)pyridine]iridium(III), [2-(phenyl)pyridine]bis[2-(bromophenyl)pyridine]iridium(III), tris(2-phenylpyridine)iridium(III) (all three ligands in the Ir complexes are orthometalated), and a monomer made from the reaction of N-ethyl-3-carbazolecarboxaldehyde and a reaction product of 1,4-dibromo-2,5-bis(bromomethyl)benzene with tri-Et phosphite was dissolved in chloroform (0.2 weight%) and spin-coated to form a thin film which showed illumination intensity 1.97 at 450 nm, 1.78 at 476 nm, and 1.67 at 523 nm.

IT **612823-45-7P**
(preparation of polymeric metal complexes having carbazole derivative for organic electroluminescent materials)

RN 612823-45-7 HCAPLUS

CN Iridium, bis[bromo-2-(2-pyridinyl-κN)phenyl-κC][2-(2-pyridinyl-κN)phenyl-κC]-, polymer with

2,7-dibromo-9,9-dioctyl-9H-fluorene, 3,3'-[(2,5-dibromo-1,4-phenylene)di-2,1-ethenediyl]bis[9-ethyl-9H-carbazole] and tris[bromo-2-(2-pyridinyl-κN)phenyl-κC]iridium (9CI) (CA INDEX NAME)

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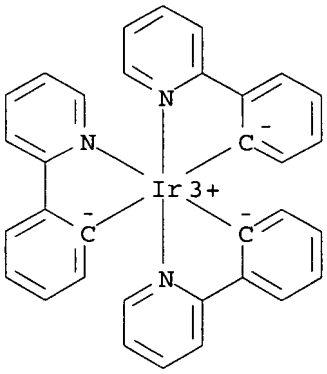
CRN 612823-44-6
CMF C33 H22 Br2 Ir N3
CCI CCS, IDS



2 (D1—Br)

CM 2

CRN 494775-71-2
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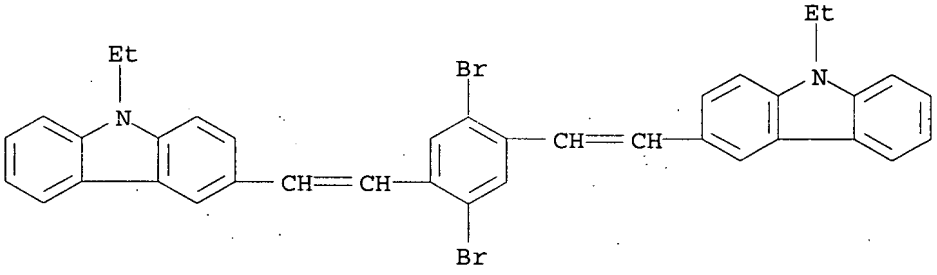

CM 3

CRN 364732-77-4
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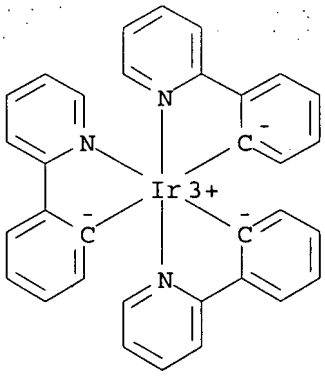
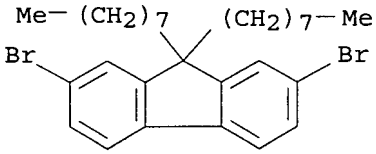
CCI CCS, IDS



3 (D1—Br)

CM 4

CRN 198964-46-4
CMF C29 H40 Br2



IC ICM C07F015-00
ICS C08G061-12; C09K011-06; H05B033-14
CC 29-13 (Organometallic and Organometalloidal Compounds)
Section cross-reference(s): 27, 35, 73
IT **Luminescent substances**
(electroluminescent; preparation of polymeric metal complexes having carbazole derivative for organic electroluminescent materials)
IT **612823-45-7P**
(preparation of polymeric metal complexes having carbazole derivative for organic electroluminescent materials)
REFERENCE COUNT: 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L43 ANSWER 7 OF 16 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2001:101049 HCAPLUS
DOCUMENT NUMBER: 134:164557
TITLE: Thermal waterless lithographic printing plates for near IR laser imaging
INVENTOR(S): Nguyen, My T.
PATENT ASSIGNEE(S): American Dye Source Inc., Can.
SOURCE: PCT Int. Appl., 57 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001008885	A1	20010208	WO 2000-CA797 <--	20000704
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
CA 2279299	A1	20010129	CA 1999-2279299 <--	19990729
EP 1214197	A1	20020619	EP 2000-945482 <--	20000704
EP 1214197	B1	20040609		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL				
AT 268692	T	20040615	AT 2000-945482 <--	20000704
ES 2222911	T3	20050216	ES 2000-945482 <--	20000704

PRIORITY APPLN. INFO.: CA 1999-2279299 A 19990729 <--
WO 2000-CA797 W 20000704 <--

ED Entered STN: 09 Feb 2001

AB Thermal waterless lithog. printing plates that can be imaged with near IR laser light without post chemical processing step, useful for computer-to-plate and digital-offset-press technologies, comprises (i) a support substrate, and (ii) a composite top layer consisting of: (a) a near IR absorbing adhesion promoting layer applied to the support substrate, such as an benz[e]indolium perchlorate based polyurethane and (b) a near IR absorbing ink repelling cross-linked silicone polymer layer, a benz[e]indolium methylbenzenesulfonic acid based polysiloxane.

IT **324780-63-4P 324780-64-5P 324780-67-8P**
324780-68-9P 324780-69-0P
(thermal waterless lithog. printing plates for near IR laser imaging)

RN 324780-63-4 HCAPLUS

CN 1H-Benz[e]indolium, 2-[2-[2-chloro-3-[[1,3-dihydro-3-(2-hydroxyethyl)-1,1-dimethyl-2H-benz[e]indol-2-ylidene]ethylidene]-1-cyclohexen-1-yl]ethenyl]-3-(2-hydroxyethyl)-1,1-dimethyl-, perchlorate, polymer with 1,6-diisocyanatotrimethylhexane and α,α,α',.alpha.'-tetramethyl-1,4-benzenedimethanol (9CI) (CA INDEX NAME)

CM 1

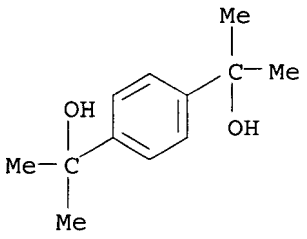
CRN 28679-16-5
CMF C11 H18 N2 O2
CCI IDS

OCN— $(CH_2)_6$ —NCO

3 (D1—Me)

CM 2

CRN 2948-46-1
CMF C12 H18 O2

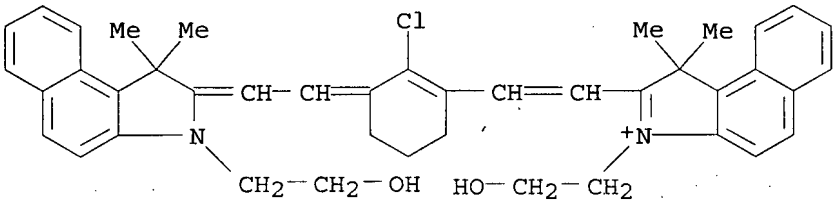


CM 3

CRN 324780-62-3
CMF C42 H44 Cl N2 O2 . Cl O4

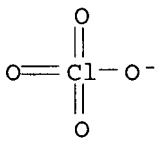
CM 4

CRN 263762-21-6
CMF C42 H44 Cl N2 O2



CM 5

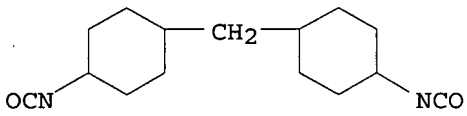
CRN 14797-73-0
CMF Cl O4



RN 324780-64-5 HCAPLUS
CN 1H-Benz[e]indolium, 2-[2-[2-chloro-3-[[1,3-dihydro-3-(2-hydroxyethyl)-1,1-dimethyl-2H-benz[e]indol-2-ylidene]ethylidene]-1-cyclohexen-1-yl]ethenyl]-3-(2-hydroxyethyl)-1,1-dimethyl-, perchlorate, polymer with 1,1'-methylenebis[4-isocyanatocyclohexane] and α,α,α',α'-tetramethyl-1,4-benzenedimethanol (9CI) (CA INDEX NAME)

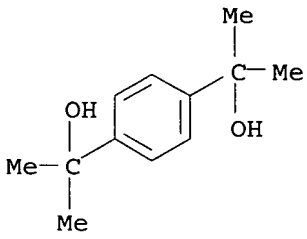
CM 1

CRN 5124-30-1
CMF C15 H22 N2 O2



CM 2

CRN 2948-46-1
CMF C12 H18 O2

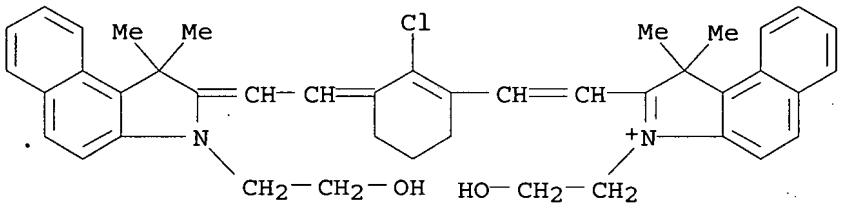


CM 3

CRN 324780-62-3
CMF C42 H44 Cl N2 O2 . Cl O4

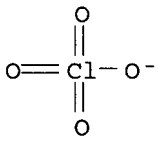
CM 4

CRN 263762-21-6
CMF C42 H44 Cl N2 O2



CM 5

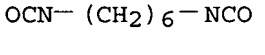
CRN 14797-73-0
CMF Cl O4



RN 324780-67-8 HCAPLUS
CN 1H-Benz[e]indolium, 2-[2-[3-[[1,3-dihydro-3-(2-hydroxyethyl)-1,1-dimethyl-2H-benz[e]indol-2-ylidene]ethylidene]-2-(2-propenyloxy)-1-cyclohexen-1-yl]ethenyl]-3-(2-hydroxyethyl)-1,1-dimethyl-, perchlorate, polymer with 1,6-diisocyanatotrimethylhexane and α,α,α',α'-tetramethyl-1,4-benzenedimethanol (9CI) (CA INDEX NAME)

CM 1

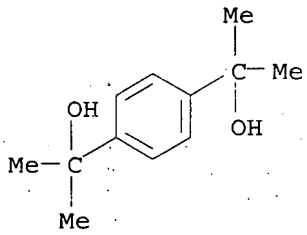
CRN 28679-16-5
CMF C11 H18 N2 O2
CCI IDS



3 (D1—Me)

CM 2

CRN 2948-46-1
CMF C12 H18 O2



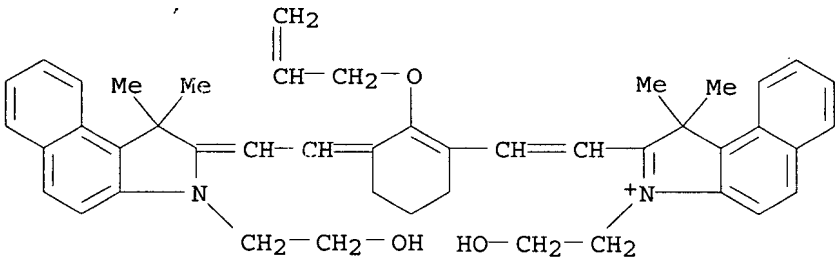
CM 3

CRN 324780-66-7
CMF C45 H49 N2 O3 . Cl O4

CM 4

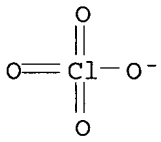
CRN 324780-65-6

CMF C45 H49 N2 O3



CM 5

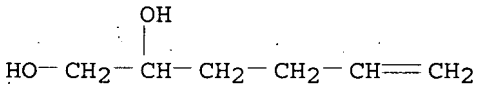
CRN 14797-73-0
CMF Cl O4



RN 324780-68-9 HCAPLUS
CN 1H-Benz[e]indolium, 2-[2-[2-chloro-3-[[1,3-dihydro-3-(2-hydroxyethyl)-1,1-dimethyl-2H-benz[e]indol-2-ylidene]ethylidene]-1-cyclohexen-1-yl]ethenyl]-3-(2-hydroxyethyl)-1,1-dimethyl-, perchlorate, polymer with 5-hexene-1,2-diol, 1,1'-methylenebis[4-isocyanatocyclohexane] and α,α,α',α'-tetramethyl-1,4-benzenedimethanol (9CI) (CA INDEX NAME)

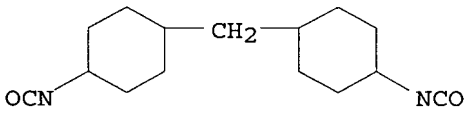
CM 1

CRN 36842-44-1
CMF C6 H12 O2



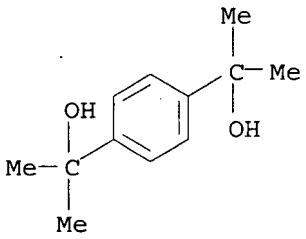
CM 2

CRN 5124-30-1
CMF C15 H22 N2 O2



CM 3

CRN 2948-46-1
CMF C12 H18 O2

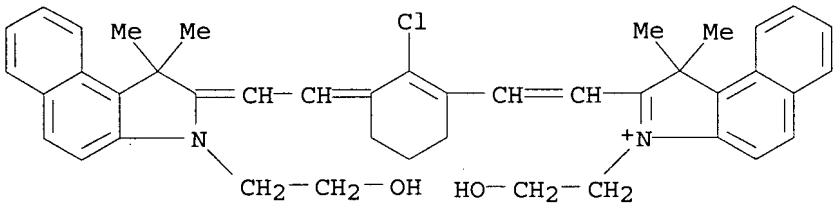


CM 4

CRN 324780-62-3
CMF C42 H44 Cl N2 O2 . Cl O4

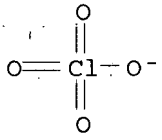
CM 5

CRN 263762-21-6
CMF C42 H44 Cl N2 O2



CM 6

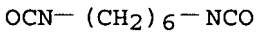
CRN 14797-73-0
CMF Cl O4



RN 324780-69-0 HCAPLUS
CN 1H-Benz[e]indolium, 2-[2-[2-chloro-3-[[1,3-dihydro-3-(2-hydroxyethyl)-1,1-dimethyl-2H-benz[e]indol-2-ylidene]ethylidene]-1-cyclohexen-1-yl]ethenyl]-3-(2-hydroxyethyl)-1,1-dimethyl-, perchlorate, polymer with 1,6-diisocyanatotrimethylhexane, 2-hydroxy-5-methyl-1,3-benzenedimethanol and α,α,α',α'-tetramethyl-1,4-benzenedimethanol (9CI) (CA INDEX NAME)

CM 1

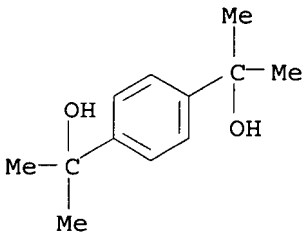
CRN 28679-16-5
CMF C11 H18 N2 O2
CCI IDS



3 (D1—Me)

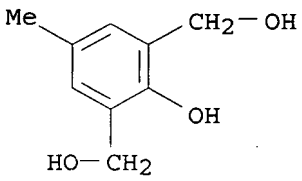
CM 2

CRN 2948-46-1
CMF C12 H18 O2



CM 3

CRN 91-04-3
CMF C9 H12 O3

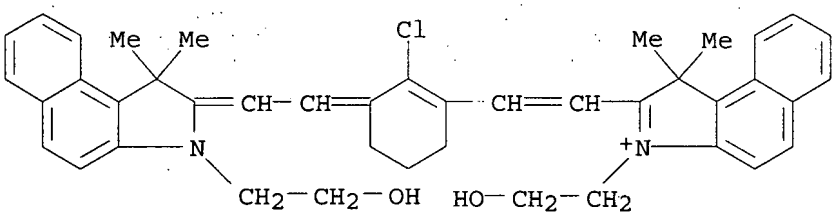


CM 4

CRN 324780-62-3
CMF C42 H44 Cl N2 O2 . Cl O4

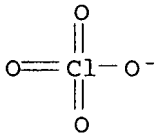
CM 5

CRN 263762-21-6
CMF C42 H44 Cl N2 O2



CM 6

CRN 14797-73-0
CMF Cl O4



IC ICM B41C001-10
ICS B41N001-00
CC 42-10 (Coatings, Inks, and Related Products)
IT **Lithographic plates**
(waterless; thermal waterless lithog. printing plates for near IR laser imaging)
IT 59942-04-0DP, PS 445, reaction products with benz[e]indolium
324780-63-4P 324780-64-5P 324780-67-8P
324780-68-9P 324780-69-0P 324780-70-3DP, reaction products with polysiloxane 324780-72-5DP, reaction products with polysiloxane 324780-75-8DP, reaction products with polysiloxane 324780-78-1DP, reaction products with polysiloxane 324780-80-5DP, reaction products with polysiloxane 324780-82-7DP, reaction products with polysiloxane 324780-84-9DP, reaction products with polysiloxane
(thermal waterless lithog. printing plates for near IR laser imaging)
REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L43 ANSWER 8 OF 16 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2000:680396 HCAPLUS
DOCUMENT NUMBER: 133:274344
TITLE: Thermally reactive near infrared absorption polymer coatings, method of preparing and methods of use
INVENTOR(S): Nguyen, My T.
PATENT ASSIGNEE(S): American Dye Source, Inc., Can.
SOURCE: U.S., 16 pp.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE

US 6124425	A	20000926	US 1999-275032 <--	19990318
CA 2266263	A1	20000922	CA 2000-2266263 <--	19990322
WO 2000056791	A1	20000928	WO 2000-CA296 <--	20000317
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
EP 1161469	A1	20011212	EP 2000-910470 <--	20000317
EP 1161469	B1	20040811		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
AT 273331	T	20040815	AT 2000-910470 <--	20000317
ES 2223472	T3	20050301	ES 2000-910470 <--	20000317
US 6177182	B1	20010123	US 2000-561817 <--	20000501
PRIORITY APPLN. INFO.:			US 1999-275032 A <--	19990318
			WO 2000-CA296 W <--	20000317

ED Entered STN: 28 Sep 2000

AB Provided here are novel polymeric coating materials for direct digital imaging by laser. More specifically the novel coating materials are thermally reactive near IR absorption polymers designed for use with near IR laser imaging devices. This invention further extends to the preparation and methods of use of the novel materials. The invention is particularly useful in the preparation of lithog. printing plates for computer-to-plate and digital-offset-press technologies. The invention extends to photoresist applications, to rapid prototyping of printed circuit boards and to chemical sensor development.

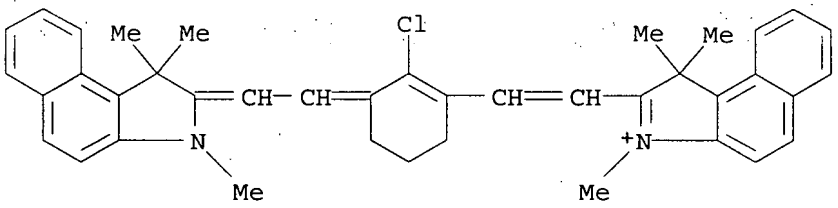
IT **297174-00-6P 297174-03-9P 297174-06-2P**
297174-07-3P 297174-09-5P 297174-11-9P
297174-13-1P 297174-15-3P 297174-17-5P
297174-18-6P 297174-20-0P
(synthesis of near-IR absorption polymer thermal coatings for direct digital imaging by laser)

RN 297174-00-6 HCAPLUS

CN 1H-Benz[e]indolium, 2-[2-[2-chloro-3-[(1,3-dihydro-1,1,3-trimethyl-2H-benz[e]indol-2-ylidene)ethylidene]-1-cyclohexen-1-yl]ethenyl]-1,1,3-trimethyl-, chloride, compd. with 4-ethenylpyridine polymer with N-(methoxymethyl)-2-methyl-2-propenamide (9CI) (CA INDEX NAME)

CM 1

CRN 297173-98-9
CMF C40 H40 Cl N2 . Cl



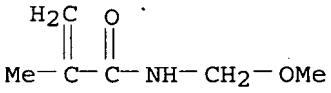
● Cl⁻

CM 2

CRN 297173-99-0
CMF (C7 H7 N . C6 H11 N O2)x
CCI PMS

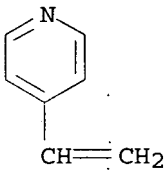
CM 3

CRN 3644-12-0
CMF C6 H11 N O2



CM 4

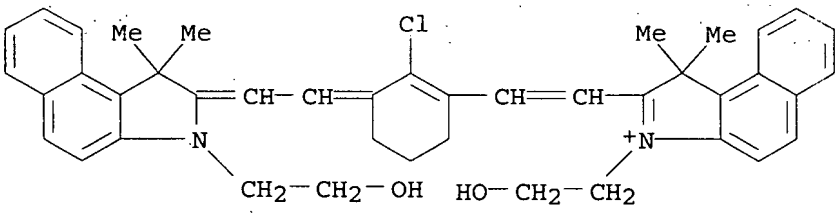
CRN 100-43-6
CMF C7 H7 N



RN 297174-03-9 HCAPLUS
CN 1H-Benz[e]indolium, 2-[2-[2-chloro-3-[[1,3-dihydro-3-(2-hydroxyethyl)-1,1-dimethyl-2H-benz[e]indol-2-ylidene]ethylidene]-1-cyclohexen-1-yl]ethenyl]-3-(2-hydroxyethyl)-1,1-dimethyl-, chloride, compd. with 4-ethenylpyridine polymer with N-(methoxymethyl)-2-methyl-2-propenamide (9CI) (CA INDEX NAME)

CM 1

CRN 297174-02-8
CMF C42 H44 Cl N2 O2 . Cl



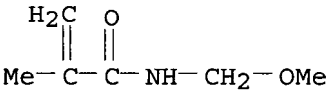
● Cl^-

CM 2

CRN 297173-99-0
CMF (C7 H7 N . C6 H11 N O2)x
CCI PMS

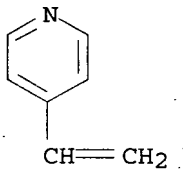
CM 3

CRN 3644-12-0
CMF C6 H11 N O2



CM 4

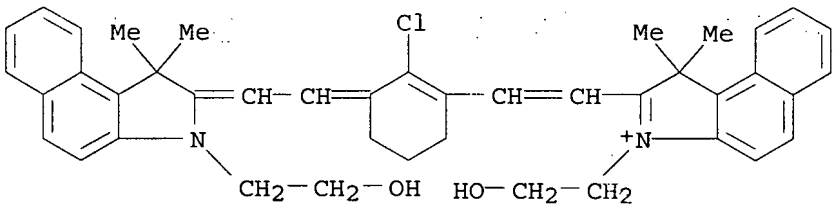
CRN 100-43-6
CMF C7 H7 N



RN 297174-06-2 HCAPLUS
CN 1H-Benz[e]indolium, 2-[2-[2-chloro-3-[[1,3-dihydro-3-(2-hydroxyethyl)-1,1-dimethyl-2H-benz[e]indol-2-ylidene]ethylidene]-1-cyclohexen-1-yl]ethenyl]-3-(2-hydroxyethyl)-1,1-dimethyl-, chloride, compd. with butyl 2-methyl-2-propenoate polymer with 4-ethenylpyridine and N-(methoxymethyl)-2-methyl-2-propenamide (9CI) (CA INDEX NAME)

CM 1

CRN 297174-02-8
CMF C42 H44 Cl N2 O2 . Cl



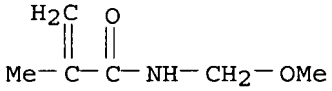
● Cl⁻

CM 2

CRN 297174-05-1
CMF (C8 H14 O2 . C7 H7 N . C6 H11 N O2)x
CCI PMS

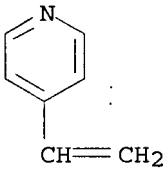
CM 3

CRN 3644-12-0
CMF C6 H11 N O2



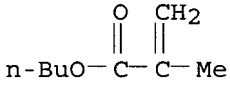
CM 4

CRN 100-43-6
CMF C7 H7 N



CM 5

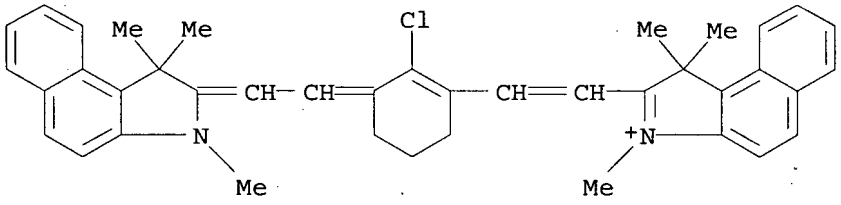
CRN 97-88-1
CMF C8 H14 O2



RN 297174-67-3 HCAPLUS
CN 1H-Benz[e]indolium, 2-[2-[2-chloro-3-[(1,3-dihydro-1,1,3-trimethyl-2H-benz[e]indol-2-ylidene)ethylidene]-1-cyclohexen-1-yl]ethenyl]-1,1,3-trimethyl-, chloride, compd. with 2-chloroethenol and 4-ethenylpyridine polymer with N-(methoxymethyl)-2-methyl-2-propenamide (9CI) (CA INDEX NAME)

CM 1

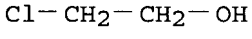
CRN 297173-98-9
CMF C40 H40 Cl N2 . Cl



● Cl⁻

CM 2

CRN 107-07-3
CMF C2 H5 Cl O

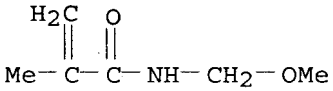


CM 3

CRN 297173-99-0
CMF (C7 H7 N . C6 H11 N O2)x
CCI PMS

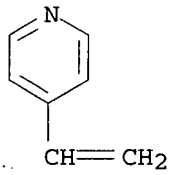
CM 4

CRN 3644-12-0
CMF C6 H11 N O2



CM 5

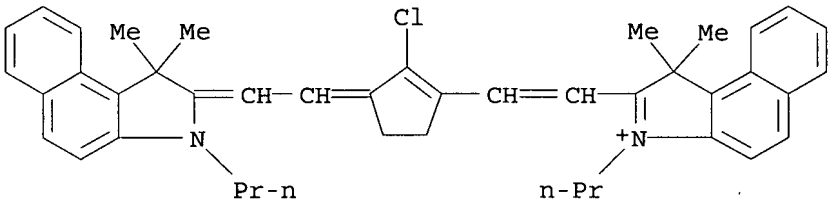
CRN 100-43-6
CMF C7 H7 N



RN 297174-09-5 HCAPLUS
CN 1H-Benz[e]indolium, 2-[2-[2-chloro-3-[(1,3-dihydro-1,1-dimethyl-3-propyl-2H-benz[e]indol-2-ylidene)ethylidene]-1-cyclopenten-1-yl]ethenyl]-1,1-dimethyl-3-propyl-, chloride, compd. with 4-ethenylpyridine polymer with N-(methoxymethyl)-2-methyl-2-propenamide (9CI) (CA INDEX NAME)

CM 1

CRN 297174-08-4
CMF C43 H46 Cl N2 . Cl

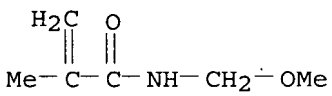


CM 2

CRN 297173-99-0
CMF (C7 H7 N . C6 H11 N O2)x
CCI PMS

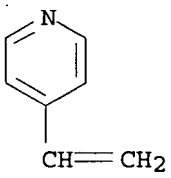
CM 3

CRN 3644-12-0
CMF C6 H11 N O2



CM 4

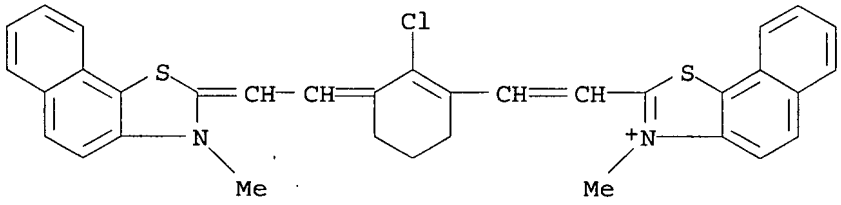
CRN 100-43-6
CMF C7 H7 N



RN 297174-11-9 HCAPLUS
CN Naphtho[2,1-d]thiazolium, 2-[2-[2-chloro-3-[(3-methylnaphtho[2,1-d]thiazol-2(3H)-ylidene)ethylidene]-1-cyclohexen-1-yl]ethenyl]-3-methyl-, chloride, compd. with 4-ethenylpyridine polymer with N-(methoxymethyl)-2-methyl-2-propenamide (9CI) (CA INDEX NAME)

CM 1

CRN 297174-10-8
CMF C34 H28 Cl N2 S2 . Cl



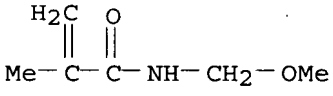
● Cl⁻

CM 2

CRN 297173-99-0
CMF (C7 H7 N . C6 H11 N O2)x
CCI PMS

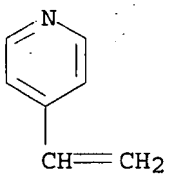
CM 3

CRN 3644-12-0
CMF C6 H11 N O2



CM 4

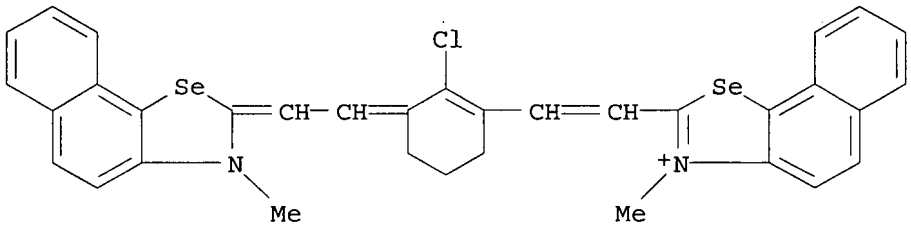
CRN 100-43-6
CMF C7 H7 N



RN 297174-13-1 HCAPLUS
CN Naphtho[2,1-d]selenazolium, 2-[2-[2-chloro-3-[(3-methylnaphtho[2,1-d]selenazol-2(3H)-ylidene)ethylidene]-1-cyclohexen-1-yl]ethenyl]-3-methyl-, chloride, compd. with 4-ethenylpyridine polymer with N-(methoxymethyl)-2-methyl-2-propenamide (9CI) (CA INDEX NAME)

CM 1

CRN 297174-12-0
CMF C34 H28 Cl N2 Se2 . Cl

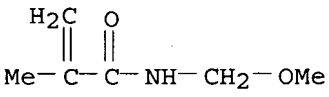


CM 2

CRN 297173-99-0
CMF (C7 H7 N . C6 H11 N O2)x
CCI PMS

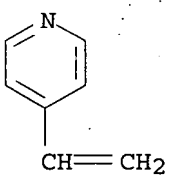
CM 3

CRN 3644-12-0
CMF C6 H11 N O2



CM 4

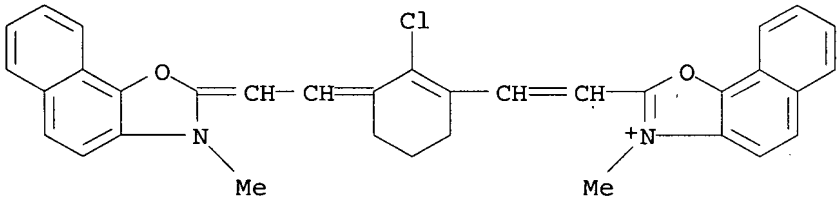
CRN 100-43-6
CMF C7 H7 N



RN 297174-15-3 HCAPLUS
CN Naphth[2,1-d]oxazolium, 2-[2-[2-chloro-3-[(3-methylnaphth[2,1-d]oxazol-2(3H)-ylidene)ethylidene]-1-cyclohexen-1-yl]ethenyl]-3-methyl-, chloride, compd. with 4-ethenylpyridine polymer with N-(methoxymethyl)-2-methyl-2-propenamide (9CI) (CA INDEX NAME)

CM 1

CRN 297174-14-2
CMF C34 H28 Cl N2 O2 . Cl

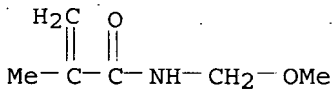


CM 2

CRN 297173-99-0
CMF (C7 H7 N . C6 H11 N O2)x
CCI PMS

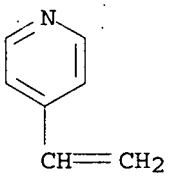
CM 3

CRN 3644-12-0
CMF C6 H11 N O2



CM 4

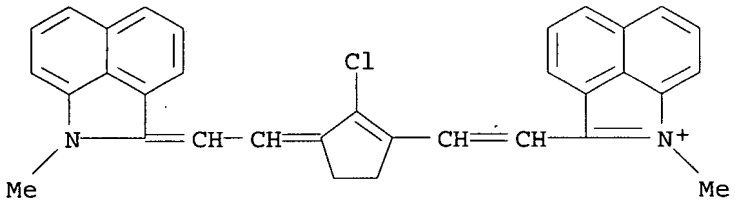
CRN 100-43-6
CMF C7 H7 N



RN 297174-17-5 HCAPLUS
CN Benz[cd]indolium, 2-[2-[2-chloro-3-[(1-methylbenz[cd]indol-2(1H)-ylidene)ethylidene]-1-cyclopenten-1-yl]ethenyl]-1-methyl-, chloride, compd. with 4-ethenylpyridine polymer with N-(methoxymethyl)-2-methyl-2-propenamide (9CI) (CA INDEX NAME)

CM 1

CRN 297174-16-4
CMF C33 H26 Cl N2 . Cl

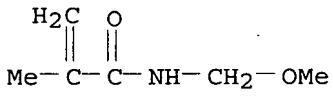


CM 2

CRN 297173-99-0
CMF (C7 H7 N . C6 H11 N O2)x
CCI PMS

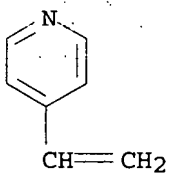
CM 3

CRN 3644-12-0
CMF C6 H11 N O2



CM 4

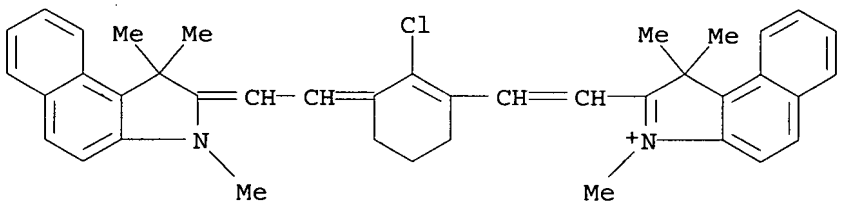
CRN 100-43-6
CMF C7 H7 N



RN 297174-18-6 HCAPLUS
CN 1H-Benz[e]indolium, 2-[2-[2-chloro-3-[(1,3-dihydro-1,1,3-trimethyl-2H-benz[e]indol-2-ylidene)ethylidene]-1-cyclohexen-1-yl]ethenyl]-1,1,3-trimethyl-, chloride, compd. with 2-chloroethanol and 4-ethenylpyridine polymer with 2-hydroxyethyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

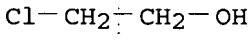
CM 1

CRN 297173-98-9
CMF C40 H40 Cl N2 . Cl



CM 2

CRN 107-07-3
CMF C2 H5 Cl O

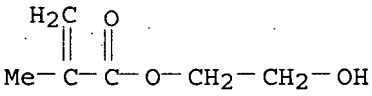


CM 3

CRN 36180-84-4
CMF (C7 H7 N . C6 H10 O3)x
CCI PMS

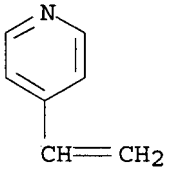
CM 4

CRN 868-77-9
CMF C6 H10 O3



CM 5

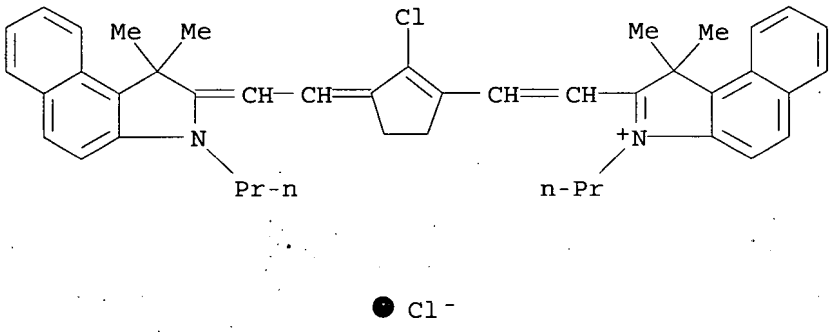
CRN 100-43-6
CMF C7 H7 N



RN 297174-20-0 HCAPLUS
CN 1H-Benz[e]indolium, 2-[2-[2-chloro-3-[(1,3-dihydro-1,1-dimethyl-3-propyl-2H-benz[e]indol-2-ylidene)ethylidene]-1-cyclopenten-1-yl]ethenyl]-1,1-dimethyl-3-propyl-, chloride, compd. with butyl 2-methyl-2-propenoate polymer with 2-(dimethylamino)ethyl 2-methyl-2-propenoate and N-(methoxymethyl)-2-methyl-2-propenamide (9CI) (CA INDEX NAME)

CM 1

CRN 297174-08-4
CMF C43 H46 Cl N2 . Cl

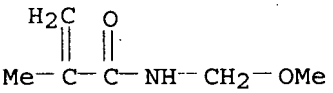


CM 2

CRN 297174-19-7
CMF (C8 H15 N O2 . C8 H14 O2 . C6 H11 N O2)x
CCI PMS

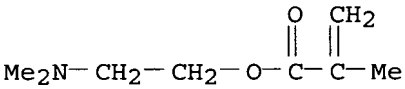
CM 3

CRN 3644-12-0
CMF C6 H11 N O2



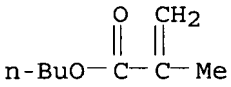
CM 4

CRN 2867-47-2
CMF C8 H15 N O2



CM 5

CRN 97-88-1
CMF C8 H14 O2



IC ICM C08G073-00
INCL 528422000
CC 74-13 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
IT Coating materials
Imaging
Lithographic plates
Photoresists
Printed circuit boards
Sensors
(preparation of chemical sensor for measuring electrode conductivity in direct
digital laser imaging)
IT 9016-83-5DP, SD 140A, ethers with cyanine dyes 110123-09-6DP, ethers with cyanine dyes 134127-48-3DP, ethers with hydroxy-containing polymers 247248-90-4DP, ethers with hydroxy-containing polymers
297174-00-6P 297174-03-9P 297174-06-2P
297174-07-3P 297174-09-5P 297174-11-9P
297174-13-1P 297174-15-3P 297174-17-5P
297174-18-6P 297174-20-0P 297752-34-2DP, ethers with cyanine dyes
(synthesis of near-IR absorption polymer thermal coatings for direct digital imaging by laser)
REFERENCE COUNT: 39 THERE ARE 39 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

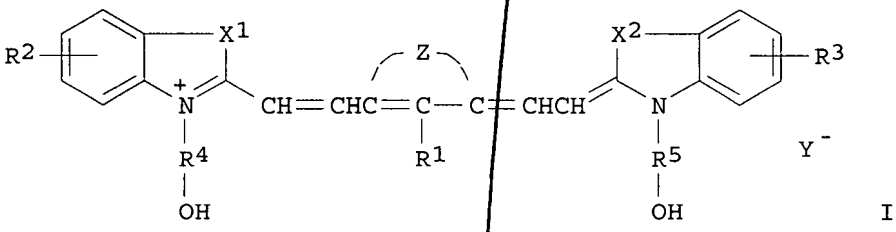
L43 ANSWER 9 OF 16 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2000:181205 HCAPLUS

DOCUMENT NUMBER: 132:214790
TITLE: Positive-working photoresist composition for near IR-sensitive direct-imaging lithographic plate making
INVENTOR(S): Hisamatsu, Naoki; Takada, Masakazu; Miura, Taketoshi
PATENT ASSIGNEE(S): Mitsubishi Paper Mills, Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 9 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2000081703	A	20000321	JP 1998-250188 <--	19980904

PRIORITY APPLN. INFO.: JP 1998-250188 <-- 19980904

OTHER SOURCE(S): MARPAT 132:214790
ED Entered STN: 21 Mar 2000
GI



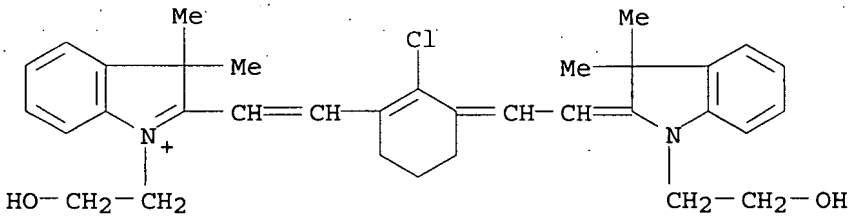
I

AB The pos.-working photoresist composition for near IR-sensitive direct-imaging lithog. plate making has a recording layer made from a three-component copolymer of a polyisocyanate, a phenol resin, and near IR-absorbing compound I (R1 = H, halo, diphenylamine; R2-3 = H, halo, alkoxy, phenyl; R4-5 = divalent connecting group; Z = divalent cyclohexene, cyclopentene residue; Y- = counter anion). The resist composition provides a development process without a heating step and shows the excellent storageability.

IT **260548-95-6P**
(copolymer for pos.-working photoresist composition)
RN 260548-95-6 HCAPLUS
CN 3H-Indolium, 2-[2-[2-chloro-3-[[1,3-dihydro-1-(2-hydroxyethyl)-3,3-dimethyl-2H-indol-2-ylidene]ethylidene]-1-cyclohexen-1-yl]ethenyl]-1-(2-hydroxyethyl)-3,3-dimethyl-, iodide, polymer with 1,6-diisocyanatohexane, formaldehyde and 3-methylphenol (9CI) (CA INDEX NAME)

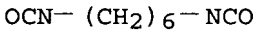
CM 1

CRN 260548-94-5
CMF C34 H40 Cl N2 O2 . I



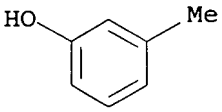
CM 2

CRN 822-06-0
CMF C8 H12 N2 O2



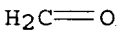
CM 3

CRN 108-39-4
CMF C7 H8 O



CM 4

CRN 50-00-0
CMF C H2 O



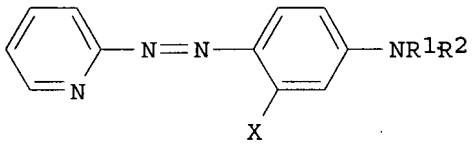
IC ICM G03F007-039
ICS B41N001-14; G03F007-00; G03F007-004
CC 74-5 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
IT **Lithographic plates**
Positive photoresists
(pos.-working photoresist composition for near IR-sensitive direct-imaging lithog. plate making)
IT **260548-95-6P**
(copolymer for pos.-working photoresist composition)

L43 ANSWER 10 OF 16 HCAPLUS COPYRIGHT 2007 ACS on STN

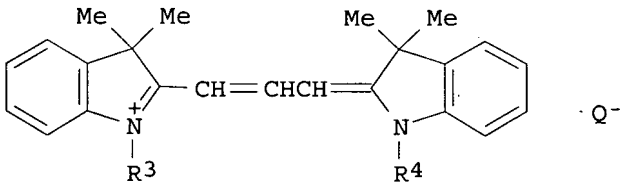
ACCESSION NUMBER: 1997:508973 HCAPLUS
DOCUMENT NUMBER: 127:227475
TITLE: Optical recording material and recording method
INVENTOR(S): Maeda, Shuichi
PATENT ASSIGNEE(S): Mitsubishi Chemical Industries Ltd., Japan; Mitsubishi Chemical Corp.
SOURCE: Jpn. Kokai Tokkyo Koho, 15 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 09193545	A	19970729	JP 1996-6479 <--	19960118
JP 3648823	B2	20050518		

PRIORITY APPLN. INFO.: JP 1996-6479 <-- 19960118
OTHER SOURCE(S): MARPAT 127:227475
ED Entered STN: 11 Aug 1997
GI



I



II

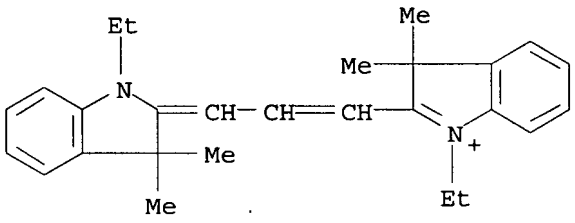
AB The material comprises a substrate coated with a recording layer, capable of recording and reading by using lasers, containing a mixture of an azo metal chelate compound of an azo compound I [R1, R2 = H or (substituted) alkyl, aryl, alkenyl or cycloalkyl, R1 and R2 may link to form a hydrocarbon or heterocyclic ring; benzene rings may be substituted; X = OH, CO2H, SO3H or these salt] and metals and an indolenine-type cyanine dye II [R3, R4 = (substituted) alkyl, aryl, alkenyl or cycloalkyl; Q- = anion residue; benzene rings may be substituted]. The title method comprises irradiating the material with a laser beam of wavelength 620-690 nm. The material shows less jitter and shows high sensitivity in high speed recording using relative low wavelength laser beams.

IT **194938-01-7**
(optical recording material containing azo metal chelate compound and indolenine-type cyanine dye)
RN 194938-01-7 HCAPLUS
CN 3H-Indolium, 1-ethyl-2-[3-(1-ethyl-1,3-dihydro-3,3-dimethyl-2H-indol-2-

ylidene)-1-propenyl]-3,3-dimethyl-, hexafluorophosphate(1-), homopolymer (9CI) (CA INDEX NAME)

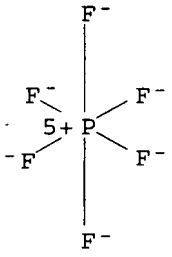
CM 1

CRN 38912-20-8
CMF C27 H33 N2



CM 2

CRN 16919-18-9
CMF F6 P
CCI CCS



IC ICM B41M005-26
ICS C09B067-22; G11B007-24
CC 74-12 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
Section cross-reference(s): 41
IT Cyanine dyes
Optical recording materials
(optical recording material containing azo metal chelate compound and indolenine-type cyanine dye)
IT 14696-39-0 131145-76-1 186818-77-9 186818-78-0 186818-79-1 186818-81-5 **194938-01-7** 194938-03-9 194938-05-1 195145-24-5 195145-35-8
(optical recording material containing azo metal chelate compound and indolenine-type cyanine dye)

L43 ANSWER 11 OF 16 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1997:440133 HCAPLUS
DOCUMENT NUMBER: 127:52214
TITLE: New polymeric cyanine dyes and optical recording elements containing them with reduced bubble formation
INVENTOR(S): Burns, Elizabeth G.; Fleming, James C.

PATENT ASSIGNEE(S): Eastman Kodak Company, USA
SOURCE: Eur. Pat. Appl., 19 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 774495	A1	19970521	EP 1996-420324 <--	19961105
R: DE, FR, GB				
JP 09263056	A	19971007	JP 1996-302803 <--	19961114
US 5932690	A	19990803	US 1997-832590 <--	19970402
PRIORITY APPLN. INFO.:			US 1995-557252 A <--	19951114

ED Entered STN: 16 Jul 1997

AB An optical recording element has, in the following order, a transparent substrate, a recording layer, and a light-reflecting layer; the recording layer has a real refractive index at 780 nm ≥1.8 and an imaginary part ≤0.15, a thickness >200 nm, and comprises a polymeric cyanine dye that has a weight-average mol. weight >50,000 and/or a glass-transition temperature (Tg) of <150°. Thus, 1,1,2-trimethylbenz[e]indole was quaternized with BrCH2CH2OH and the product condensed with MeOCH:CHCH(OMe)2 to give a cyanine diol, which was converted from the bromide to the trifluoromethanesulfonate and polymerized with hexamethylene diisocyanate to give a polymeric dye. A 120-mm polycarbonate disk 1.2 mm thick with an embossed tracking groove was spin-coated with a 5% solution of the polymeric dye in HCF2CF2CH2OH to the appropriate thickness, covered with a 130-nm reflective Au layer, and finally spin-coated with a protective polyacrylate (Daicure SD 17) to .apprx.5 μm and cured to give a writable CD-ROM.

IT **186523-84-2P**
(polymeric cyanine dyes and optical recording elements containing them)

RN 186523-84-2 HCAPLUS

CN 1H-Benz[e]indolium, 2-[5-[1,3-dihydro-3-(2-hydroxyethyl)-1,1-dimethyl-2H-benz[e]indol-2-ylidene]-1,3-pentadienyl]-3-(2-hydroxyethyl)-1,1-dimethyl-, salt with trifluoromethanesulfonic acid (1:1), polymer with 1,6-diisocyanatohexane (9CI) (CA INDEX NAME)

CM 1

CRN 822-06-0
CMF C8 H12 N2 O2

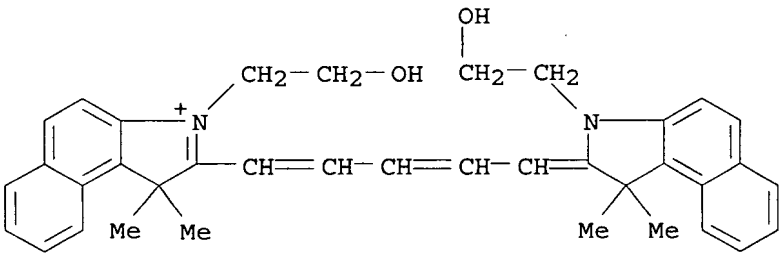
OCN—$(CH_2)_6$—NCO

CM 2

CRN 186523-83-1
CMF C37 H39 N2 O2 . C F3 O3 S

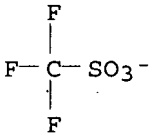
CM 3

CRN 186523-82-0
CMF C37 H39 N2 O2



CM 4

CRN 37181-39-8
CMF C F3 O3 S



IC ICM C09B069-10
ICS G11B007-24
CC 41-6 (Dyes, Organic Pigments, Fluorescent Brighteners, and Photographic Sensitizers)
Section cross-reference(s): 74
IT **Optical recording materials**
(polymeric cyanine dye-containing)
IT **186523-84-2P**
(polymeric cyanine dyes and optical recording elements containing them)

L43 ANSWER 12 OF 16 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1997:154978 HCAPLUS
DOCUMENT NUMBER: 126:158752
TITLE: Polymeric dyes for optical recording layers, and recording elements containing them
INVENTOR(S): Burns, Elizabeth Gertrude; Kovacs, Csaba Andras; Goswami, Ramanuj; Chapman, Derek D.
PATENT ASSIGNEE(S): Eastman Kodak Company, USA
SOURCE: Eur. Pat. Appl., 85 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 750020	A2	19961227	EP 1996-201669 <--	19960614
EP 750020	A3	19990421		

N: DE, FR, GB

US 5786123	A	19980728	US 1996-618489 <--		19960319
JP 09132626	A	19970520	JP 1996-158204 <--		19960619
US 5824768	A	19981020	US 1997-909497 <--		19970812
PRIORITY APPLN. INFO.:			US 1995-295P <--	P	19950619
			US 1996-618489 <--	A	19960319

ED Entered STN: 10 Mar 1997

AB A recordable optical element (e.g., a writable CD) comprises a transparent substrate, a polymeric dye-containing recording layer on the surface of the substrate, and a metallic light-reflective layer. Use of polymeric dyes in the element improves the cohesion of the recording layer and its adhesion to the substrate and to the reflective layer.

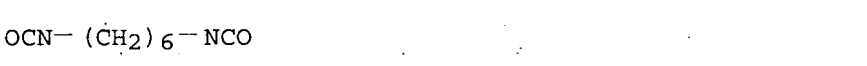
IT **186523-84-2P 186523-86-4P 186523-87-5P**
186523-89-7P 186523-90-0P 186523-92-2P
186523-94-4P 186523-95-5P 186523-97-7P
186523-98-8P 186524-00-5P 186524-01-6P
186524-03-8P 186524-06-1P 186524-08-3P
186524-09-4P 186524-11-8P 186524-13-0P
186524-15-2P 186524-20-9P 186524-22-1P
186524-24-3P 186524-27-6P 186524-29-8P
186524-31-2P 186524-32-3P 186524-35-6P
186524-37-8P 186524-39-0P 186524-40-3P
186524-43-6P 186524-45-8P 186524-47-0P
186524-49-2P 186524-50-5P 186524-51-6P
186524-52-7P 186524-53-8P 186524-56-1P
186524-57-2P
(optical recording elements containing polymeric dyes)

RN 186523-84-2 HCAPLUS

CN 1H-Benz[e]indolium, 2-[5-[1,3-dihydro-3-(2-hydroxyethyl)-1,1-dimethyl-2H-benz[e]indol-2-ylidene]-1,3-pentadienyl]-3-(2-hydroxyethyl)-1,1-dimethyl-, salt with trifluoromethanesulfonic acid (1:1), polymer with 1,6-diisocyanatohexane (9CI) (CA INDEX NAME)

CM 1

CRN 822-06-0
CMF C8 H12 N2 O2

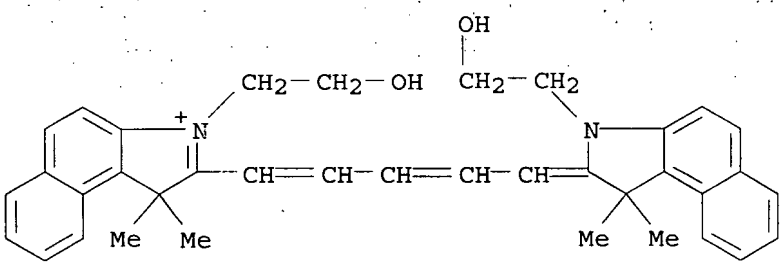


CM 2

CRN 186523-83-1
CMF C37 H39 N2 O2 . C F3 O3 S

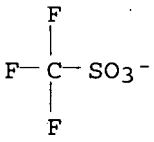
CM 3

CRN 186523-82-0
CMF C37 H39 N2 O2



CM 4

CRN 37181-39-8
CMF C F3 O3 S

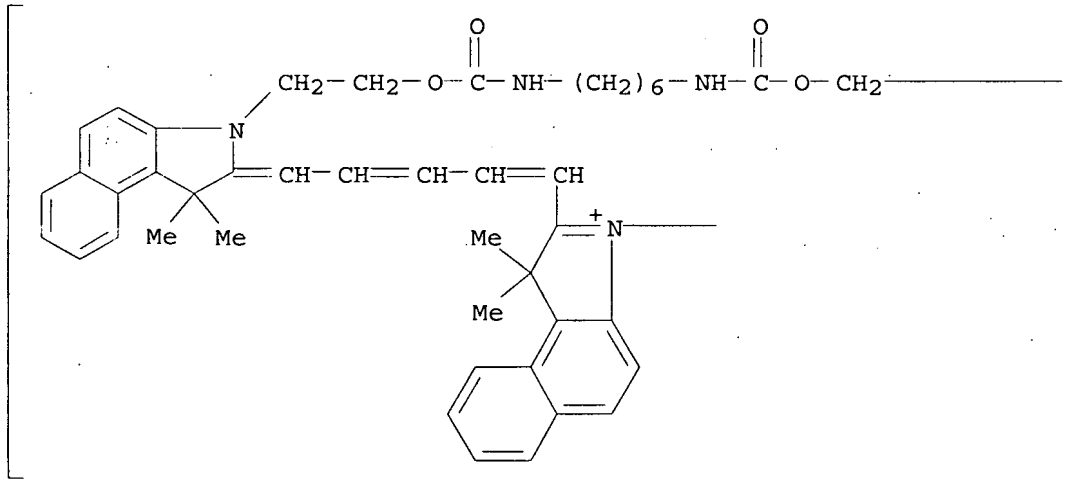


RN 186523-86-4 HCAPLUS
CN Poly[(1,1-dimethyl-1H-benz[e]indolium-3,2-diyl)-1,3-pentadien-1-yl-5-ylidene(1,1-dimethyl-1H-benz[e]indol-3(2H)-yl-2-ylidene)-1,2-ethanediyloxycarbonylimino-1,6-hexanediyliminocarbonyloxy-1,2-ethanediyl salt with trifluoromethanesulfonic acid (1:1)] (9CI) (CA INDEX NAME)

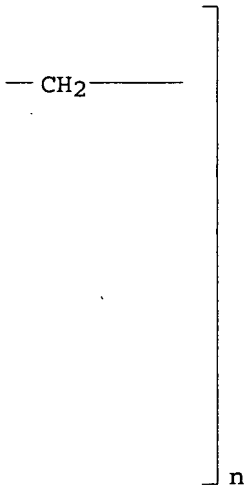
CM 1

CRN 186523-85-3
CMF (C45 H51 N4 O4)n
CCI PMS

PAGE 1-A

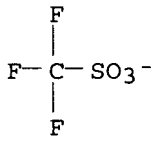


PAGE 1-B



CM 2

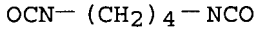
CRN 37181-39-8
CMF C F3 O3 S



RN 186523-87-5 HCAPLUS
CN 1H-Benz[e]indolium, 2-[5-[1,3-dihydro-3-(2-hydroxyethyl)-1,1-dimethyl-2H-benz[e]indol-2-ylidene]-1,3-pentadienyl]-3-(2-hydroxyethyl)-1,1-dimethyl-, salt with trifluoromethanesulfonic acid (1:1), polymer with 1,4-diisocyanatobutane (9CI) (CA INDEX NAME)

CM 1

CRN 4538-37-8
CMF C6 H8 N2 O2

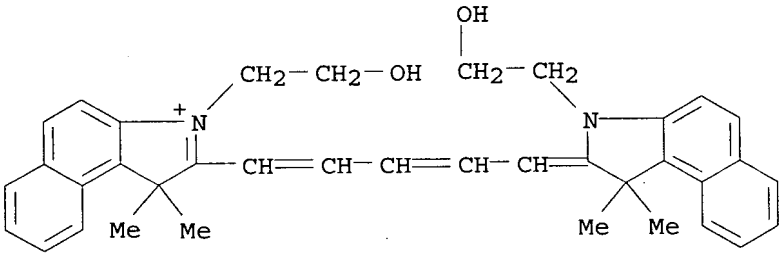


CM 2

CRN 186523-83-1
CMF C37 H39 N2 O2 . C F3 O3 S

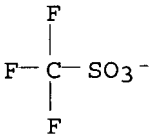
CM 3

CRN 186523-82-0
CMF C37 H39 N2 O2



CM 4

CRN 37181-39-8
CMF C F3 O3 S

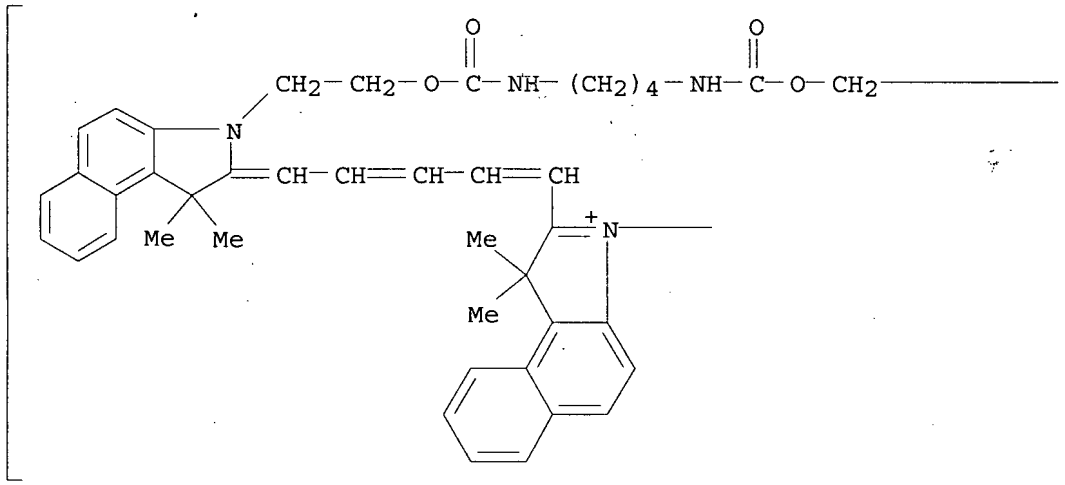


RN 186523-89-7 HCAPLUS
CN Poly[(1,1-dimethyl-1H-benz[e]indolium-3,2-diyl)-1,3-pentadien-1-yl-5-ylidene(1,1-dimethyl-1H-benz[e]indol-3(2H)-yl-2-ylidene)-1,2-ethanediyloxycarbonylimino-1,4-butanediyliminocarbonyloxy-1,2-ethanediyl salt with trifluoromethanesulfonic acid (1:1)] (9CI) (CA INDEX NAME)

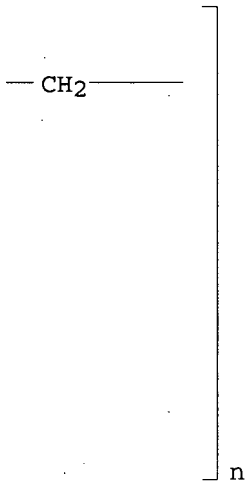
CM 1

CRN 186523-88-6
CMF (C43 H47 N4 O4)n
CCI PMS

PAGE 1-A

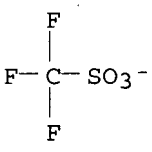


PAGE 1-B



CM 2

CRN 37181-39-8
CMF C F3 O3 S



RN 186523-90-0 HCAPLUS
CN 1H-Benz[e]indolium, 2-[5-[1,3-dihydro-3-(2-hydroxyethyl)-1,1-dimethyl-2H-benz[e]indol-2-ylidene]-1,3-pentadienyl]-3-(2-hydroxyethyl)-1,1-dimethyl-, salt with trifluoromethanesulfonic acid (1:1), polymer with 1,12-diisocyanatododecane (9CI) (CA INDEX NAME)

CM 1

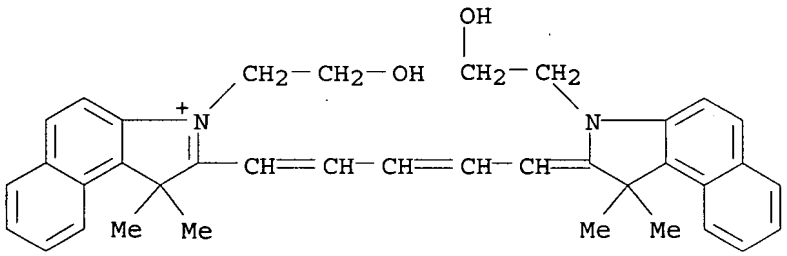
CRN 13879-35-1
CMF C14 H24 N2 O2

CM 2

CRN 186523-83-1
CMF C37 H39 N2 O2 . C F3 O3 S

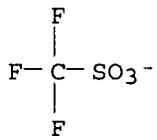
CM 3

CRN 186523-82-0
CMF C37 H39 N2 O2



CM 4

CRN 37181-39-8
CMF C F3 O3 S

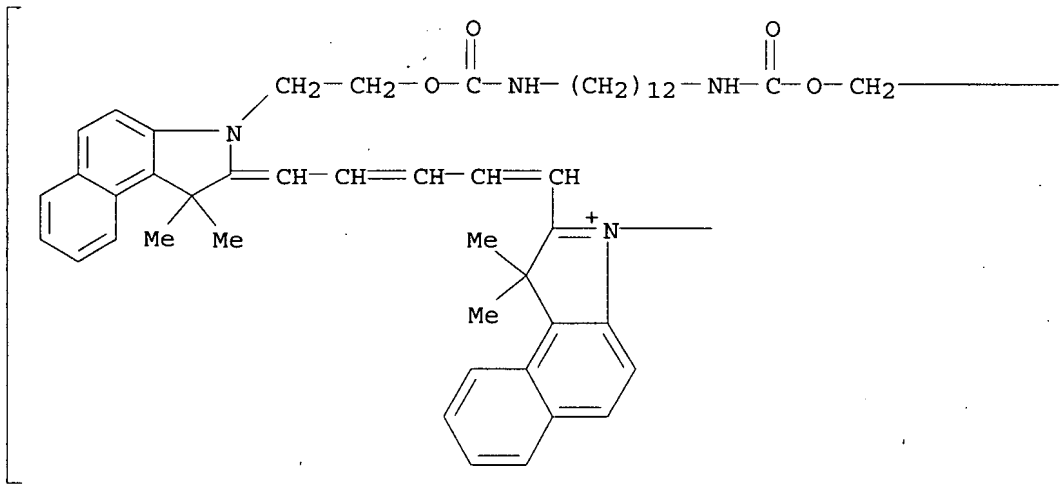


RN 186523-92-2 HCAPLUS
CN Poly[(1,1-dimethyl-1H-benz[e]indolium-3,2-diyl)-1,3-pentadien-1-yl-5-ylidene(1,1-dimethyl-1H-benz[e]indol-3(2H)-yl-2-ylidene)-1,2-ethanediyloxycarbonylimino-1,12-dodecanediyliminocarbonyloxy-1,2-ethanediyl salt with trifluoromethanesulfonic acid (1:1)] (9CI) (CA INDEX NAME)

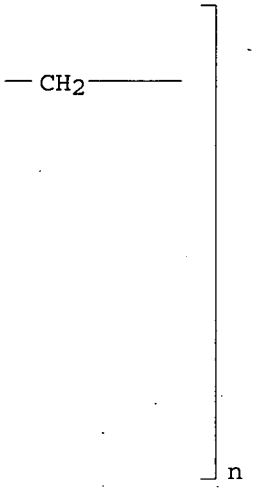
CM 1

CRN 186523-91-1
CMF (C51 H63 N4 O4)n
CCI PMS

PAGE 1-A

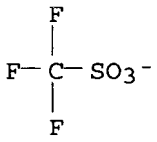


PAGE 1-B



CM 2

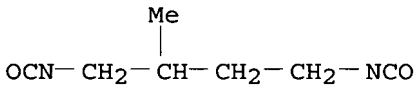
CRN 37181-39-8
CMF C F3 O3 S



RN 186523-94-4 HCAPLUS
CN 1H-Benz[e]indolium, 2-[5-[1,3-dihydro-3-(2-hydroxyethyl)-1,1-dimethyl-2H-benz[e]indol-2-ylidene]-1,3-pentadienyl]-3-(2-hydroxyethyl)-1,1-dimethyl-, salt with trifluoromethanesulfonic acid (1:1), polymer with 1,4-diisocyanato-2-methylbutane (9CI) (CA INDEX NAME)

CM 1

CRN 186523-93-3
CMF C7 H10 N2 O2

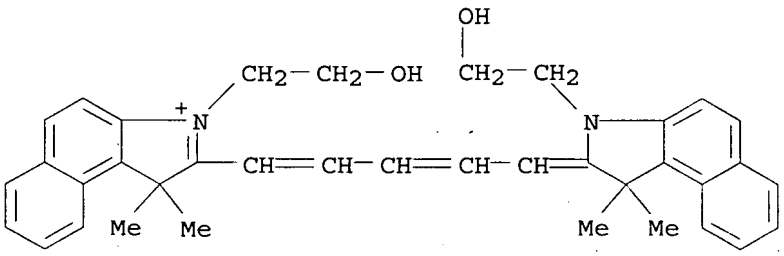


CM 2

CRN 186523-83-1
CMF C37 H39 N2 O2 . C F3 O3 S

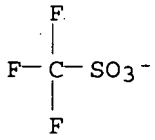
CM 3

CRN 186523-82-0
CMF C37 H39 N2 O2



CM 4

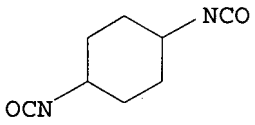
CRN 37181-39-8
CMF C F3 O3 S



RN 186523-95-5 HCAPLUS
CN 1H-Benz[e]indolium, 2-[5-[1,3-dihydro-3-(2-hydroxyethyl)-1,1-dimethyl-2H-benz[e]indol-2-ylidene]-1,3-pentadienyl]-3-(2-hydroxyethyl)-1,1-dimethyl-, salt with trifluoromethanesulfonic acid (1:1), polymer with 1,4-diisocyanatocyclohexane (9CI) (CA INDEX NAME)

CM 1

CRN 2556-36-7
CMF C8 H10 N2 O2

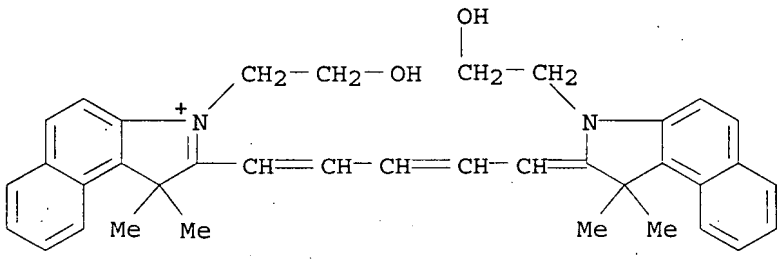


CM 2

CRN 186523-83-1
CMF C37 H39 N2 O2 . C F3 O3 S

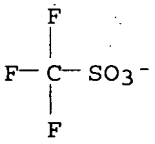
CM 3

CRN 186523-82-0
CMF C37 H39 N2 O2



CM 4

CRN 37181-39-8
CMF C F3 O3 S

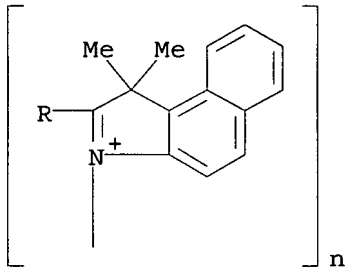


RN 186523-97-7 HCAPLUS
CN Poly[(1,1-dimethyl-1H-benz[e]indolium-3,2-diyl)-1,3-pentadien-1-yl-5-ylidene(1,1-dimethyl-1H-benz[e]indol-3(2H)-yl-2-ylidene)-1,2-ethanediyloxycarbonylimino-1,4-cyclohexanediyliminocarbonyloxy-1,2-ethanediyl salt with trifluoromethanesulfonic acid (1:1)] (9CI) (CA INDEX NAME)

CM 1

CRN 186523-96-6
CMF (C45 H49 N4 O4)n
CCI PMS

PAGE 1-A



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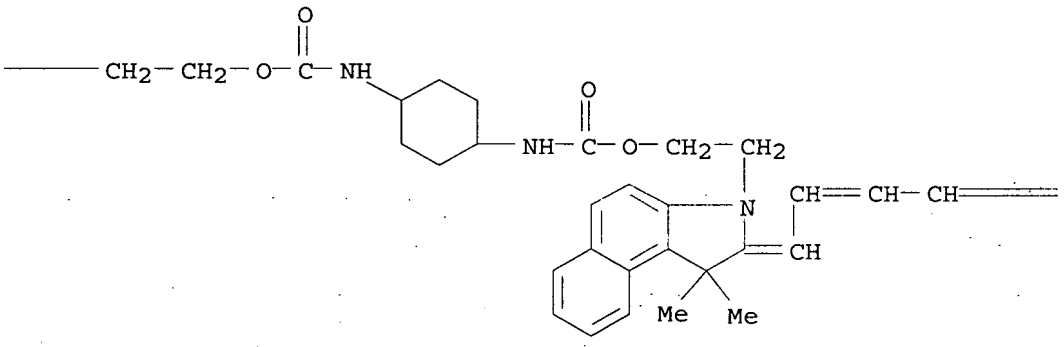

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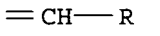
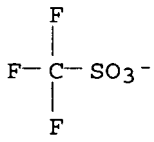


CM 2

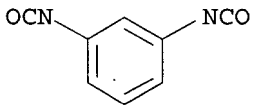
CRN 37181-39-8
CMF C F3 O3 S



RN 186523-98-8 HCAPLUS
CN 1H-Benz[e]indolium, 2-[5-[1,3-dihydro-3-(2-hydroxyethyl)-1,1-dimethyl-2H-benz[e]indol-2-ylidene]-1,3-pentadienyl]-3-(2-hydroxyethyl)-1,1-dimethyl-, salt with trifluoromethanesulfonic acid (1:1), polymer with 1,3-diisocyanatobenzene (9CI) (CA INDEX NAME)

CM 1

CRN 123-61-5
CMF C8 H4 N2 O2

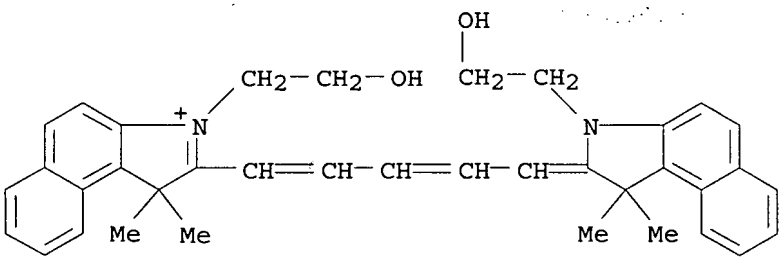


CM 2

CRN 186523-83-1
CMF C37 H39 N2 O2 . C F3 O3 S

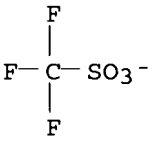
CM 3

CRN 186523-82-0
CMF C37 H39 N2 O2



CM 4

CRN 37181-39-8
CMF C F3 O3 S

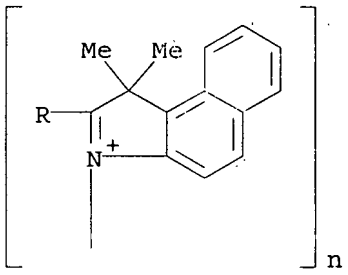


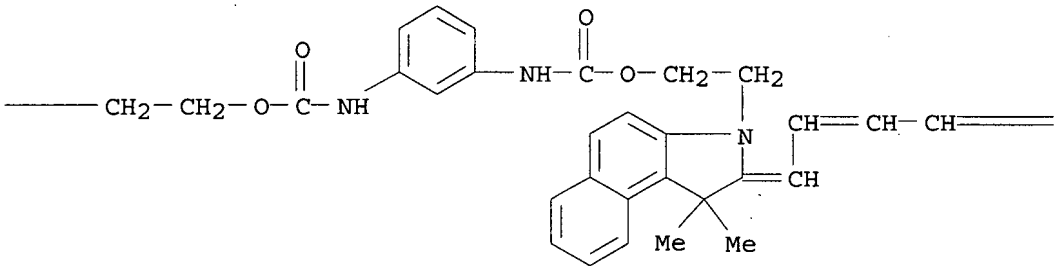
RN 186524-00-5 HCAPLUS
CN Poly[(1,1-dimethyl-1H-benz[e]indolium-3,2-diyl)-1,3-pentadien-1-yl-5-ylidene(1,1-dimethyl-1H-benz[e]indol-3(2H)-yl-2-ylidene)-1,2-ethanediyloxycarbonylimino-1,3-phenyleneiminocarbonyloxy-1,2-ethanediyl salt with trifluoromethanesulfonic acid (1:1)] (9CI) (CA INDEX NAME)

CM 1

CRN 186523-99-9
CMF (C45 H43 N4 O4)n
CCI PMS

PAGE 1-A





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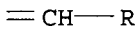
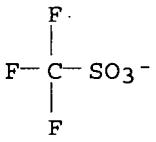


CM 2

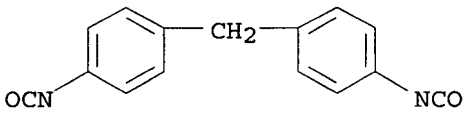
CRN 37181-39-8
CMF C F3 O3 S



RN 186524-01-6 HCAPLUS
CN 1H-Benz[e]indolium, 2-[5-[1,3-dihydro-3-(2-hydroxyethyl)-1,1-dimethyl-2H-benz[e]indol-2-ylidene]-1,3-pentadienyl]-3-(2-hydroxyethyl)-1,1-dimethyl-, salt with trifluoromethanesulfonic acid (1:1), polymer with 1,1'-methylenebis[4-isocyanatobenzene] (9CI) (CA INDEX NAME)

CM 1

CRN 101-68-8
CMF C15 H10 N2 O2

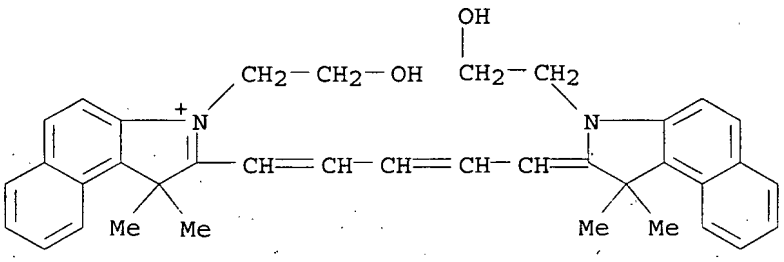


CM 2

CRN 186523-83-1
CMF C37 H39 N2 O2 . C F3 O3 S

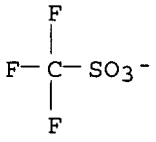
CM 3

CRN 186523-82-0
CMF C37 H39 N2 O2



CM 4

CRN 37181-39-8
CMF C F3 O3 S



RN 186524-03-8 HCAPLUS
CN Poly[(1,1-dimethyl-1H-benz[e]indolium-3,2-diyl)-1,3-pentadien-1-yl-5-ylidene(1,1-dimethyl-1H-benz[e]indol-3(2H)-yl-2-ylidene)-1,2-ethanediyloxycarbonylimino-1,4-phenylenemethylene-1,4-phenyleneiminocarbonyloxy-1,2-ethanediyl salt with trifluoromethanesulfonic acid (1:1)] (9CI) (CA INDEX NAME)

CM 1

CRN 186524-02-7
CMF (C52 H49 N4 O4)n
CCI PMS

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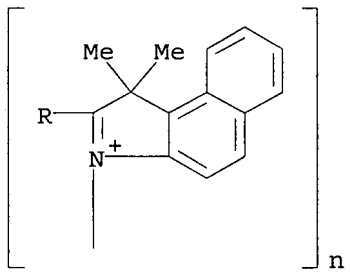

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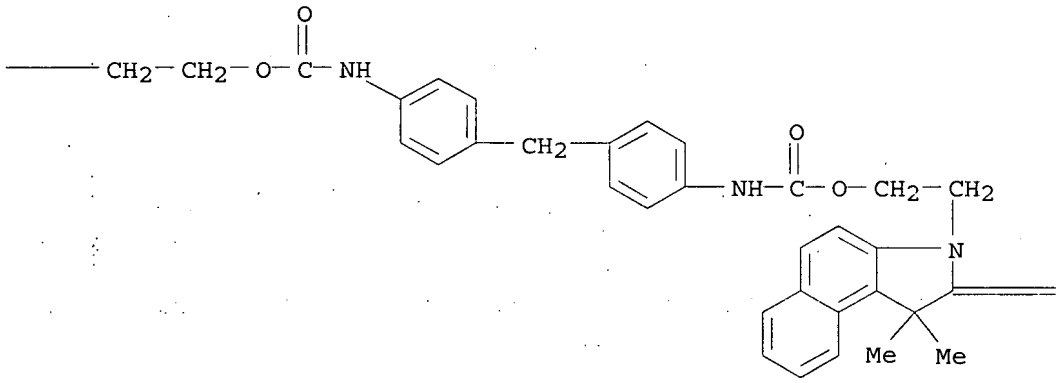
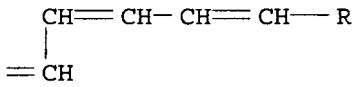
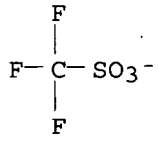




CM 2

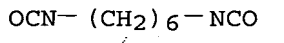
CRN 37181-39-8
CMF C F3 O3 S



RN 186524-06-1 HCAPLUS
CN 3H-Indolium, 2-[5-[1,3-dihydro-1-(2-hydroxyethyl)-3,3-dimethyl-2H-indol-2-ylidene]-1,3-pentadienyl]-1-(2-hydroxyethyl)-3,3-dimethyl-, salt with trifluoromethanesulfonic acid (1:1), polymer with 1,6-diisocyanatohexane (9CI) (CA INDEX NAME)

CM 1

CRN 822-06-0
CMF C8 H12 N2 O2

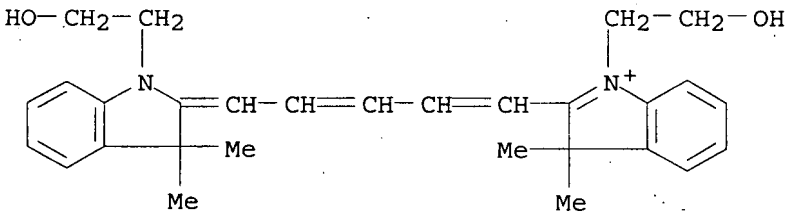


CM 2

CRN 186524-05-0
CMF C29 H35 N2 O2 . C F3 O3 S

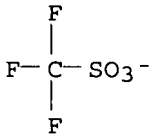
CM 3

CRN 186524-04-9
CMF C29 H35 N2 O2



CM 4

CRN 37181-39-8
CMF C F3 O3 S



RN 186524-08-3 HCAPLUS
CN Poly[(3,3-dimethyl-3H-indolium-1,2-diyl)-1,3-pentadien-1-yl-5-ylidene(2,3-dihydro-3,3-dimethyl-1H-indol-1-yl-2-ylidene)-1,2-ethanediyloxycarbonylimino-1,6-hexanediyliminocarbonyloxy-1,2-ethanediyl salt with trifluoromethanesulfonic acid (1:1)] (9CI) (CA INDEX NAME)

CM 1

CRN 186524-07-2
CMF (C37 H47 N4 O4)n
CCI PMS

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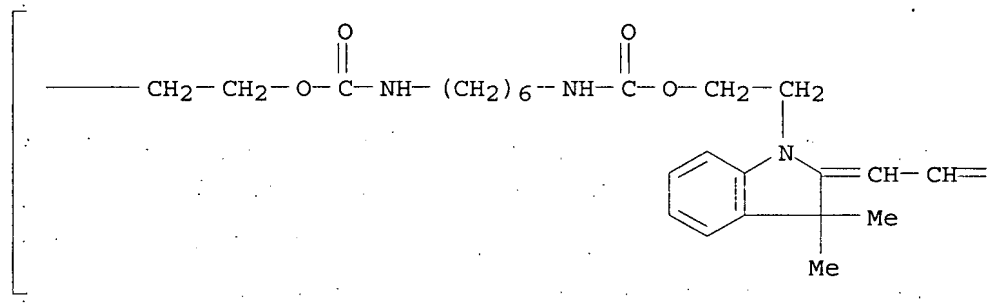

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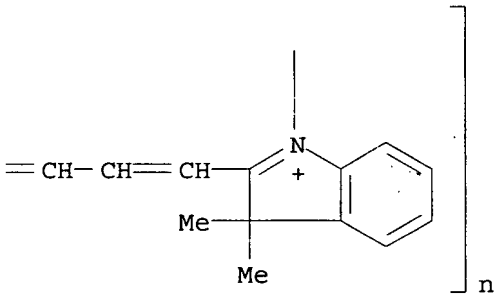
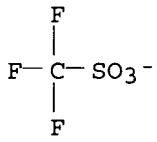


CM 2

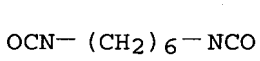
CRN 37181-39-8
CMF C F3 O3 S



RN 186524-09-4 HCAPLUS
CN 1H-Benz[e]indolium, 2-[5-[1,3-dihydro-3-(2-hydroxyethyl)-1,1-dimethyl-2H-benz[e]indol-2-ylidene]-1,3-pentadienyl]-3-(2-hydroxyethyl)-1,1-dimethyl-, salt with trifluoromethanesulfonic acid (1:1), polymer with 2-[5-[1,3-dihydro-1-(2-hydroxyethyl)-3,3-dimethyl-2H-indol-2-ylidene]-1,3-pentadienyl]-1-(2-hydroxyethyl)-3,3-dimethyl-3H-indolium salt with trifluoromethanesulfonic acid (1:1), and 1,6-diisocyanatohexane (9CI) (CA INDEX NAME)

CM 1

CRN 822-06-0
CMF C8 H12 N2 O2

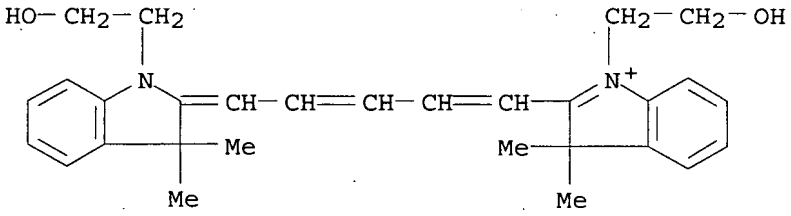


CM 2

CRN 186524-05-0
CMF C29 H35 N2 O2 . C F3 O3 S

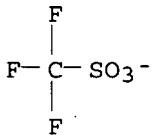
CM 3

CRN 186524-04-9
CMF C29 H35 N2 O2



CM 4

CRN 37181-39-8
CMF C F3 O3 S

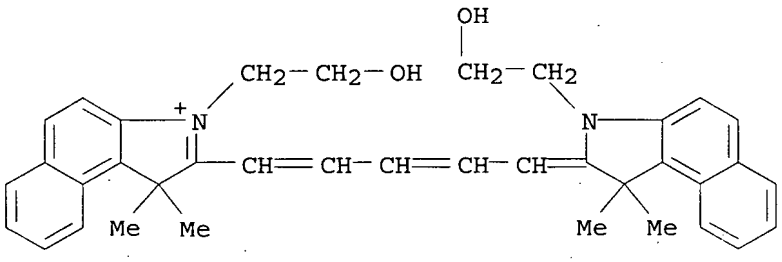


CM 5

CRN 186523-83-1
CMF C37 H39 N2 O2 . C F3 O3 S

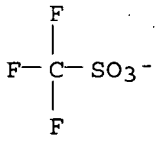
CM 6

CRN 186523-82-0
CMF C37 H39 N2 O2



CM 7

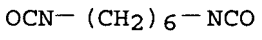
CRN 37181-39-8
CMF C F3 O3 S



RN 186524-11-8 HCAPLUS
CN 1H-Benz[e]indolium, 2-[7-[1,3-dihydro-3-(2-hydroxyethyl)-1,1-dimethyl-2H-benz[e]indol-2-ylidene]-1,3,5-heptatrienyl]-3-(2-hydroxyethyl)-1,1-dimethyl-, tris[5-methoxy-2-(nitroso-κO)phenolato-κO]ferrate(1-), polymer with 1,6-diisocyanatohexane (9CI) (CA INDEX NAME)

CM 1

CRN 822-06-0
CMF C8 H12 N2 O2

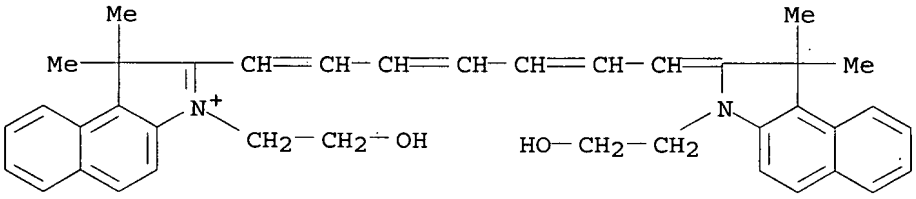


CM 2

CRN 186524-10-7
CMF C39 H41 N2 O2 . C21 H18 Fe N3 O9

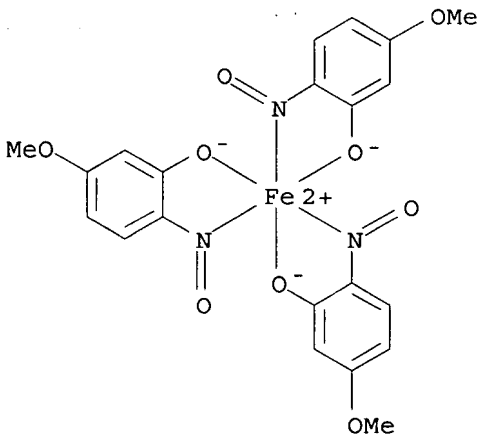
CM 3

CRN 95144-18-6
CMF C39 H41 N2 O2



CM 4

CRN 57927-83-0
CMF C21 H18 Fe N3 O9
CCI CCS



RN 186524-13-0 HCAPLUS
CN Poly[(1,1-dimethyl-1H-benz[e]indolium-3,2-diyl)-1,3,5-heptatrien-1-yl-7-ylidene(1,1-dimethyl-1H-benz[e]indol-3(2H)-yl-2-ylidene)-1,2-ethanediyloxycarbonylimino-1,6-hexanediyliminocarbonyloxy-1,2-ethanediyl tris[5-methoxy-2-(nitroso-κO)phenolato-κO]ferrate(1-)] (9CI) (CA INDEX NAME)

CM 1

CRN 186524-12-9
CMF (C47 H53 N4 O4)n
CCI PMS

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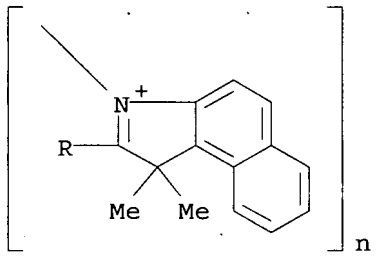

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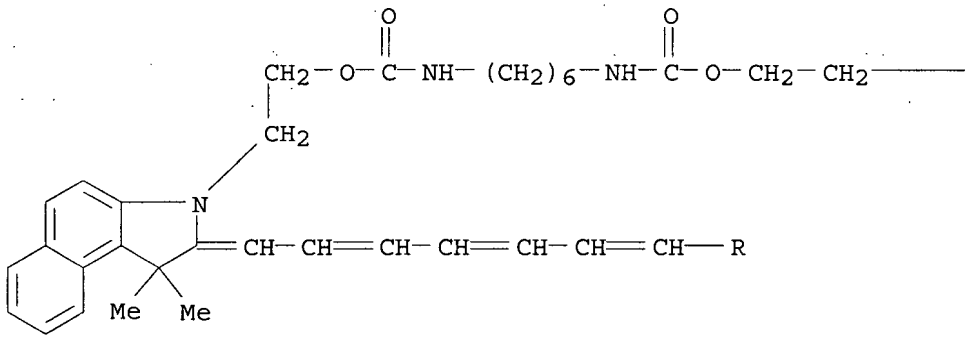
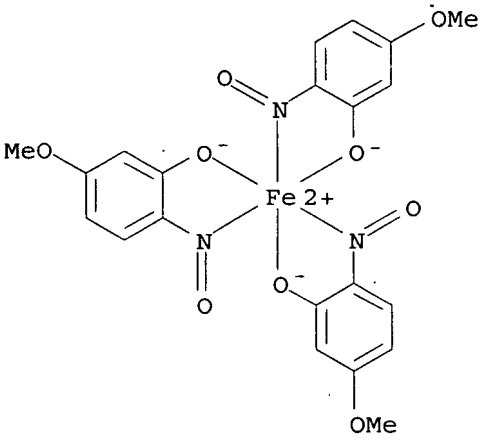


CM 2

CRN 57927-83-0
CMF C21 H18 Fe N3 O9
CCI CCS



RN 186524-15-2 HCAPLUS
CN 1H-Benz[e]indolium, 2-[5-[1,3-dihydro-3-(2-hydroxyethyl)-1,1-dimethyl-2H-benz[e]indol-2-ylidene]-1,3-pentadienyl]-3-(2-hydroxyethyl)-1,1-dimethyl-, salt with trifluoromethanesulfonic acid (1:1), polymer with 1,4-diisocyanatobutane and 1,6-diisocyanatohexane (9CI) (CA INDEX NAME)

CM 1

CRN 4538-37-8
CMF C6 H8 N2 O2

OCN— $(CH_2)_4$ —NCO

CM 2

CRN 822-06-0
CMF C8 H12 N2 O2

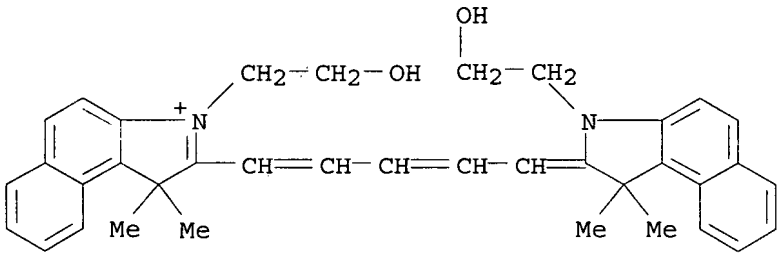
OCN— $(CH_2)_6$ —NCO

CM 3

CRN 186523-83-1
CMF C37 H39 N2 O2 . C F3 O3 S

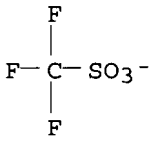
CM 4

CRN 186523-82-0
CMF C37 H39 N2 O2



CM 5

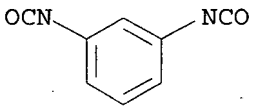
CRN 37181-39-8
CMF C F3 O3 S



RN 186524-20-9 HCAPLUS
CN 1H-Benz[e]indolium, 2-[5-[1,3-dihydro-3-(2-hydroxyethyl)-1,1-dimethyl-2H-benz[e]indol-2-ylidene]-1,3-pentadienyl]-3-(2-hydroxyethyl)-1,1-dimethyl-, salt with trifluoromethanesulfonic acid (1:1), polymer with 1,3-diisocyanatobenzene and 1,1'-methylenebis[4-isocyanatobenzene] (9CI) (CA INDEX NAME)

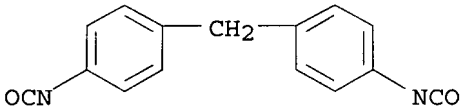
CM 1

CRN 123-61-5
CMF C8 H4 N2 O2



CM 2

CRN 101-68-8
CMF C15 H10 N2 O2

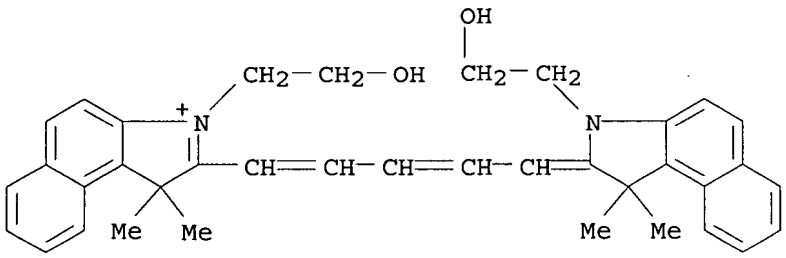


CM 3

CRN 186523-83-1
CMF C37 H39 N2 O2 . C F3 O3 S

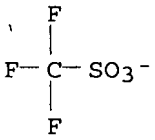
CM 4

CRN 186523-82-0
CMF C37 H39 N2 O2



CM 5

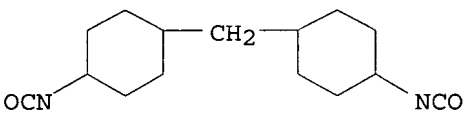
CRN 37181-39-8
CMF C F3 O3 S



RN 186524-22-1 HCAPLUS
CN 1H-Benz[e]indolium, 2-[5-[1,3-dihydro-3-(2-hydroxyethyl)-1,1-dimethyl-2H-benz[e]indol-2-ylidene]-1,3-pentadienyl]-3-(2-hydroxyethyl)-1,1-dimethyl-, salt with trifluoromethanesulfonic acid (1:1), polymer with 1,1'-methylenebis[4-isocyanatocyclohexane] (9CI) (CA INDEX NAME)

CM 1

CRN 5124-30-1
CMF C15 H22 N2 O2



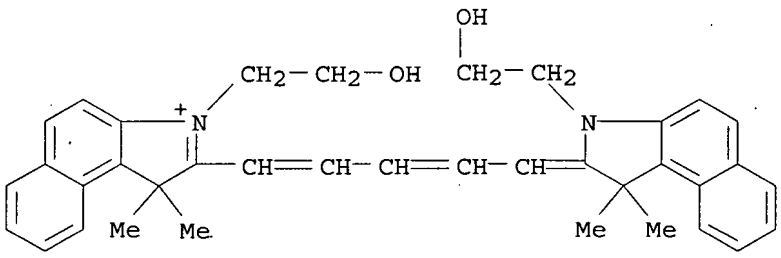
CM 2

CRN 186523-83-1

CMF C37 H39 N2 O2 . C F3 O3 S

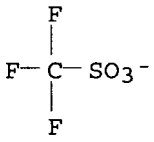
CM 3

CRN 186523-82-0
CMF C37 H39 N2 O2



CM 4

CRN 37181-39-8
CMF C F3 O3 S



RN 186524-24-3 HCAPLUS
CN Poly[(1,1-dimethyl-1H-benz[e]indolium-3,2-diyl)-1,3-pentadien-1-yl-5-ylidene(1,1-dimethyl-1H-benz[e]indol-3(2H)-yl-2-ylidene)-1,2-ethanediyloxycarbonylimino-1,4-cyclohexanediylmethylene-1,4-cyclohexanediyliminocarbonyloxy-1,2-ethanediyl salt with trifluoromethanesulfonic acid (1:1)] (9CI) (CA INDEX NAME)

CM 1

CRN 186524-23-2
CMF (C52 H61 N4 O4)n
CCI PMS

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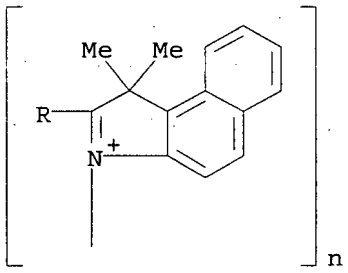

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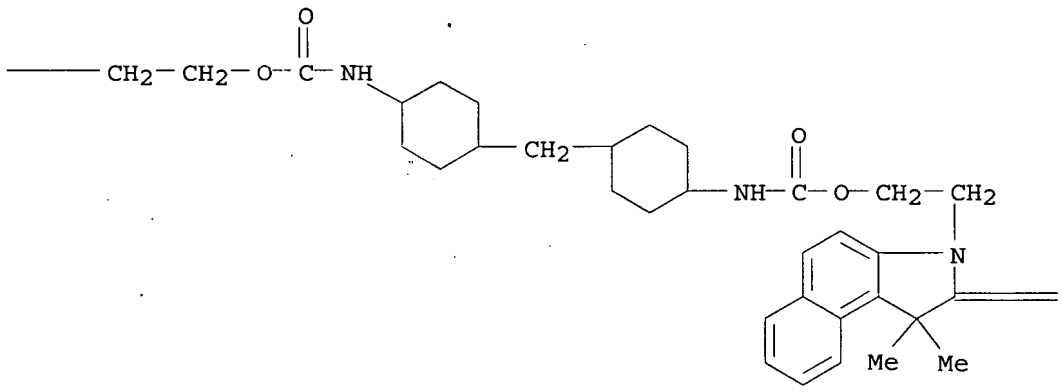

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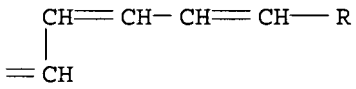
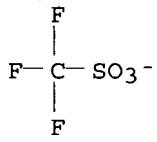


CM 2

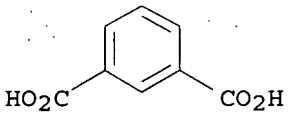
CRN 37181-39-8
CMF C F3 O3 S



RN 186524-27-6 HCAPLUS
CN 1H-Benz[e]indolium, 2-[5-[1,3-dihydro-3-(2-hydroxyethyl)-1,1-dimethyl-2H-benz[e]indol-2-ylidene]-1,3-pentadienyl]-3-(2-hydroxyethyl)-1,1-dimethyl-, salt with trifluoromethanesulfonic acid (1:1), polymer with 1,3-benzenedicarboxylic acid (9CI) (CA INDEX NAME)

CM 1

CRN 121-91-5
CMF C8 H6 O4

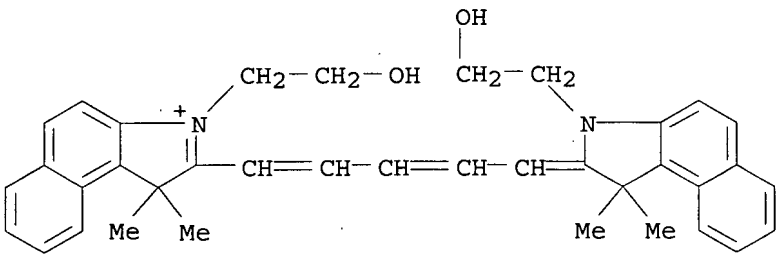


CM 2

CRN 186523-83-1
CMF C37 H39 N2 O2 . C F3 O3 S

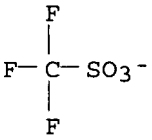
CM 3

CRN 186523-82-0
CMF C37 H39 N2 O2



CM 4

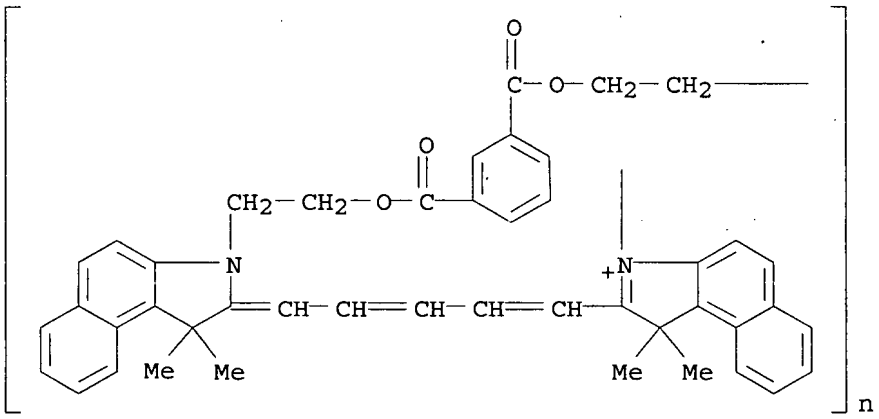
CRN 37181-39-8
CMF C F3 O3 S



RN 186524-29-8 HCAPLUS
CN Poly[(1,1-dimethyl-1H-benz[e]indolium-3,2-diyl)-1,3-pentadien-1-yl-5-ylidene(1,1-dimethyl-1H-benz[e]indol-3(2H)-yl-2-ylidene)-1,2-ethanediyloxycarbonyl-1,3-phenylenecarbonyloxy-1,2-ethanediyl salt with trifluoromethanesulfonic acid (1:1)] (9CI) (CA INDEX NAME)

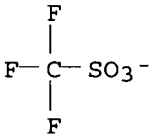
CM 1

CRN 186524-28-7
CMF (C45 H41 N2 O4)n
CCI PMS



CM 2

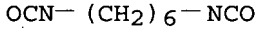
CRN 37181-39-8
CMF C F3 O3 S



RN 186524-31-2 HCAPLUS
CN 1H-Benz[e]indolium, 2-[5-[1,3-dihydro-3-(2-hydroxyethyl)-1,1-dimethyl-2H-benz[e]indol-2-ylidene]-1,3-pentadienyl]-3-(2-hydroxyethyl)-1,1-dimethyl-, salt with 4-methylbenzenesulfonic acid (1:1), polymer with 1,6-diisocyanatohexane (9CI) (CA INDEX NAME)

CM 1

CRN 822-06-0
CMF C8 H12 N2 O2

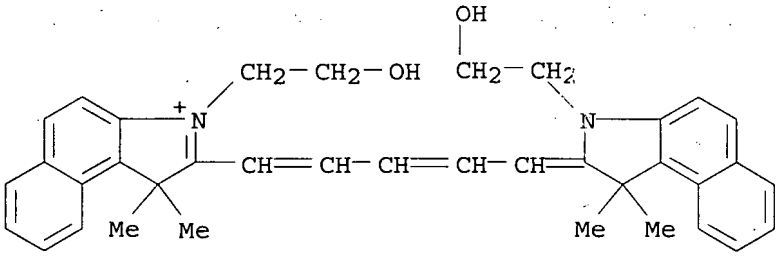


CM 2

CRN 186524-30-1
CMF C37 H39 N2 O2 . C7 H7 O3 S

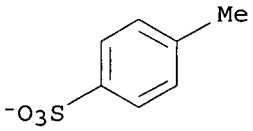
CM 3

CRN 186523-82-0
CMF C37 H39 N2 O2



CM 4

CRN 16722-51-3
CMF C7 H7 O3 S



RN 186524-32-3 HCAPLUS
CN Poly[(1,1-dimethyl-1H-benz[e]indolium-3,2-diyl)-1,3-pentadien-1-yl-5-ylidene(1,1-dimethyl-1H-benz[e]indol-3(2H)-yl-2-ylidene)-1,2-ethanediyloxycarbonylimino-1,6-hexanediyliminocarbonyloxy-1,2-ethanediyl salt with 4-methylbenzenesulfonic acid (1:1)] (9CI) (CA INDEX NAME)

CM 1

CRN 186523-85-3
CMF (C45 H51 N4 O4)n
CCI PMS

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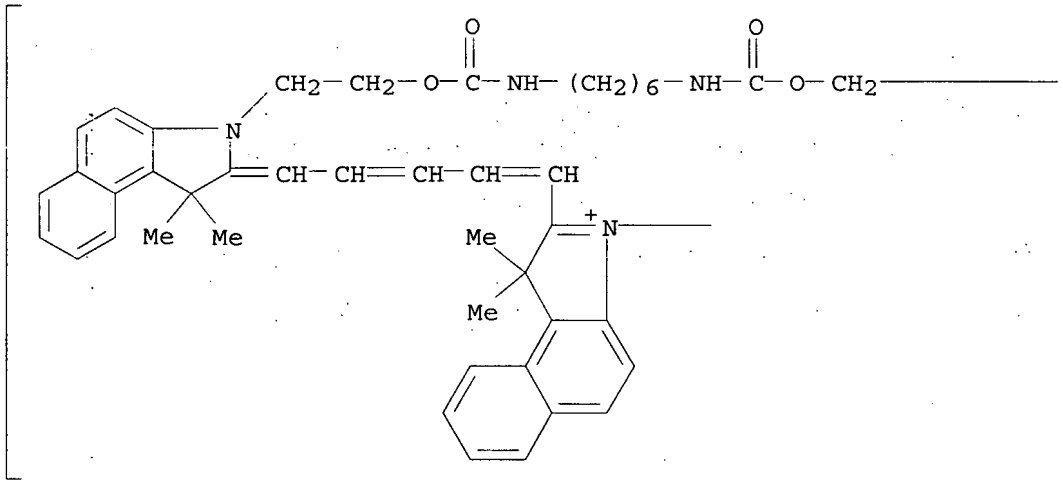

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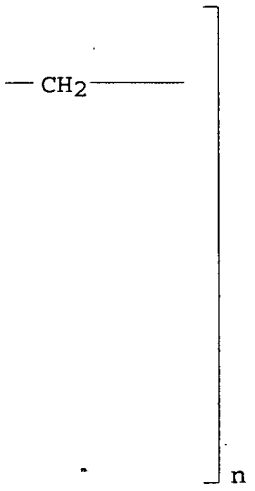
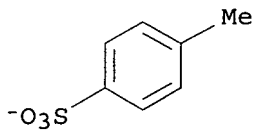


CM 2

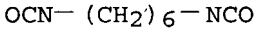
CRN 16722-51-3
CMF C7 H7 O3 S



RN 186524-35-6 HCAPLUS
CN 1H-Benz[e]indolium, 2-[5-[1,3-dihydro-3-(2-hydroxyethyl)-7-methoxy-1,1-dimethyl-2H-benz[e]indol-2-ylidene]-1,3-pentadienyl]-3-(2-hydroxyethyl)-7-methoxy-1,1-dimethyl-, salt with trifluoromethanesulfonic acid (1:1), polymer with 1,6-diisocyanatohexane (9CI) (CA INDEX NAME)

CM 1

CRN 822-06-0
CMF C8 H12 N2 O2

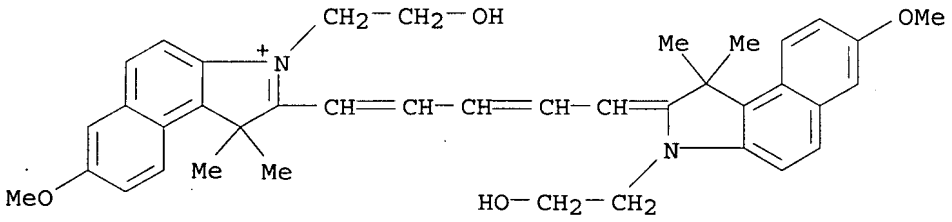


CM 2

CRN 186524-34-5
CMF C39 H43 N2 O4 . C F3 O3 S

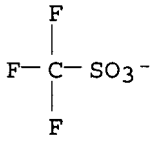
CM 3

CRN 186524-33-4
CMF C39 H43 N2 O4



CM 4

CRN 37181-39-8
CMF C F3 O3 S



RN 186524-37-8 HCAPLUS
CN Poly[(7-methoxy-1,1-dimethyl-1H-benz[e]indolium-3,2-diyl)-1,3-pentadien-1-yl-5-ylidene(7-methoxy-1,1-dimethyl-1H-benz[e]indol-3(2H)-yl-2-ylidene)-1,2-ethanediyloxycarbonylimino-1,6-hexanediyliminocarbonyloxy-1,2-ethanediyl salt with trifluoromethanesulfonic acid (1:1)] (9CI) (CA INDEX NAME)

CM 1

CRN 186524-36-7
CMF (C47 H55 N4 O6)n
CCI PMS

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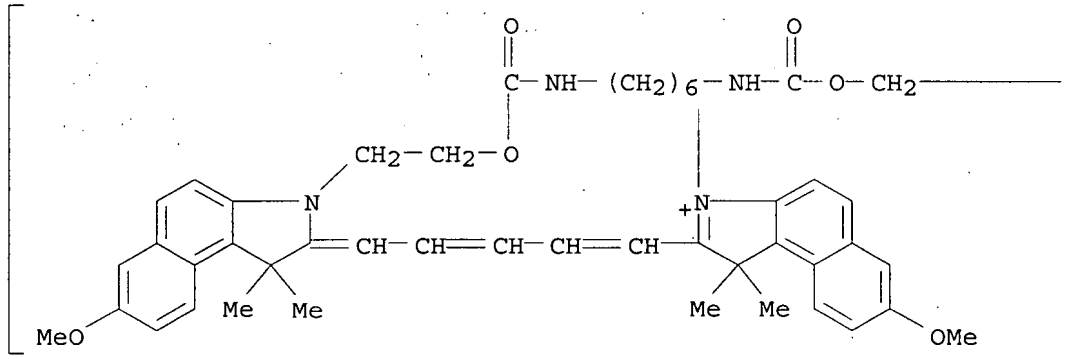

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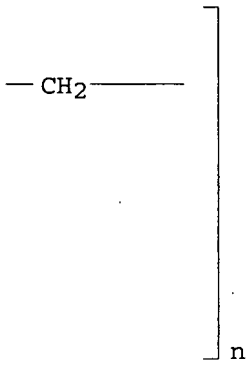
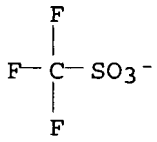


CM 2

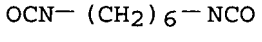
CRN 37181-39-8
CMF C F3 O3 S



RN 186524-39-0 HCAPLUS
CN 1H-Benz[e]indolium, 2-[5-[1,3-dihydro-3-(2-hydroxyethyl)-1,1-dimethyl-2H-benz[e]indol-2-ylidene]-1,3-pentadienyl]-3-(2-hydroxyethyl)-1,1-dimethyl-, tris[1-(nitroso-κN)-2-naphthalenolato-κO]ferrate(1-), polymer with 1,6-diisocyanatohexane (9CI) (CA INDEX NAME)

CM 1

CRN 822-06-0
CMF C8 H12 N2 O2

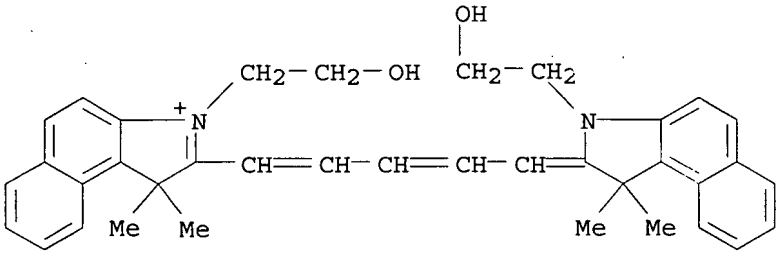


CM 2

CRN 186524-38-9
CMF C37 H39 N2 O2 . C30 H18 Fe N3 O6

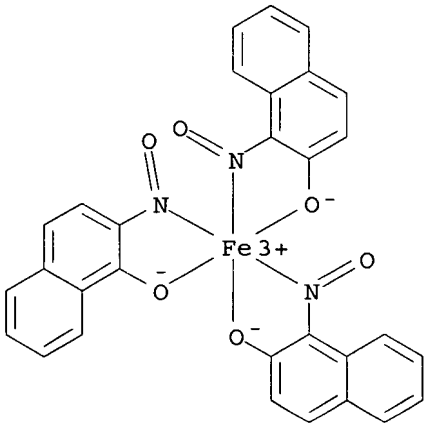
CM 3

CRN 186523-82-0
CMF C37 H39 N2 O2



CM 4

CRN 130547-27-2
CMF C30 H18 Fe N3 O6
CCI CCS



RN 186524-40-3 HCAPLUS
CN Poly[(1,1-dimethyl-1H-benz[e]indolium-3,2-diyl)-1,3-pentadien-1-yl-5-ylidene(1,3-dihydro-1,1-dimethyl-1H-benz[e]indol-3-yl-2-ylidene)-1,2-ethanediyloxycarbonylimino-1,6-hexanediyliminocarbonyloxy-1,2-ethanediyl tris[1-(nitroso-κN)-2-naphthalenolato-κO]ferrate(1-)] (9CI) (CA INDEX NAME)

CM 1

CRN 186523-85-3
CMF (C45 H51 N4 O4)n
CCI PMS

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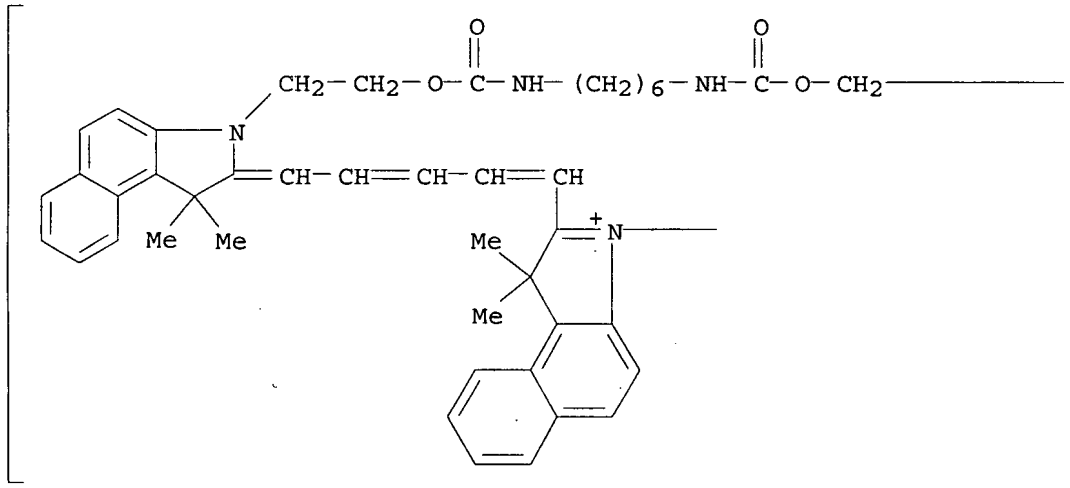

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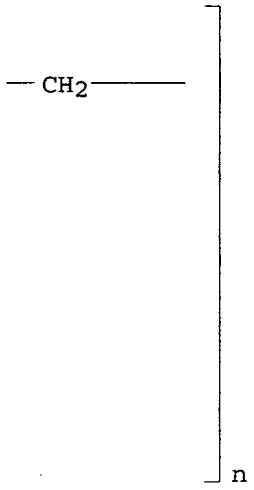
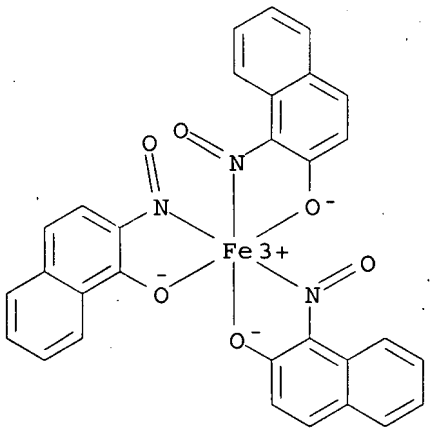


CM 2

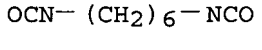
CRN 130547-27-2
CMF C30 H18 Fe N3 O6
CCI CCS



RN 186524-43-6 HCAPLUS
CN 1H-Benz[e]indolium, 3-(2-aminoethyl)-2-[5-[3-(2-aminoethyl)-1,3-dihydro-1,1-dimethyl-2H-benz[e]indol-2-ylidene]-1,3-pentadienyl]-1,1-dimethyl-, salt with trifluoromethanesulfonic acid (1:1), polymer with 1,6-diisocyanatohexane (9CI) (CA INDEX NAME)

CM 1

CRN 822-06-0
CMF C8 H12 N2 O2

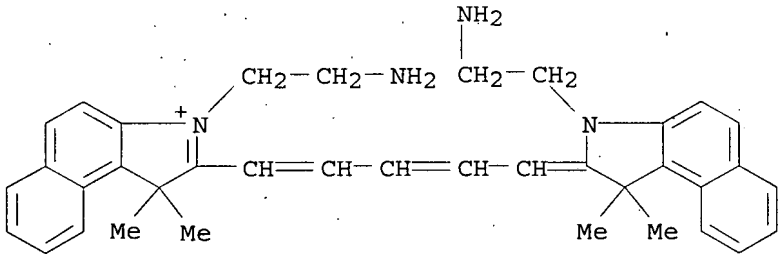


CM 2

CRN 186524-42-5
CMF C37 H41 N4 . C F3 O3 S

CM 3

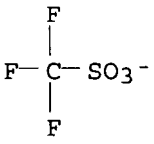
CRN 186524-41-4
CMF C37 H41 N4



CM 4

CRN 37181-39-8

CMF C F3 O3 S



RN 186524-45-8 HCAPLUS
CN Poly[(1,1-dimethyl-1H-benz[e]indolium-3,2-diyl)-1,3-pentadien-1-yl-5-ylidene(1,3-dihydro-1,1-dimethyl-1H-benz[e]indol-3-yl-2-ylidene)-1,2-ethanediyliminocarbonylimino-1,6-hexanediyliminocarbonylimino-1,2-ethanediyl salt with trifluoromethanesulfonic acid (1:1)] (9CI) (CA INDEX NAME)

CM 1

CRN 186524-44-7
CMF (C45 H53 N6 O2)n
CCI PMS

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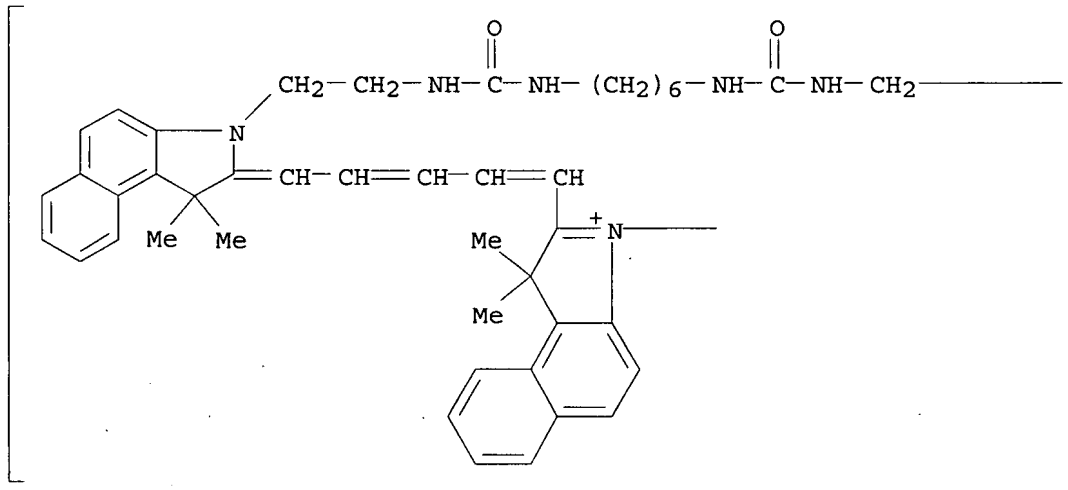

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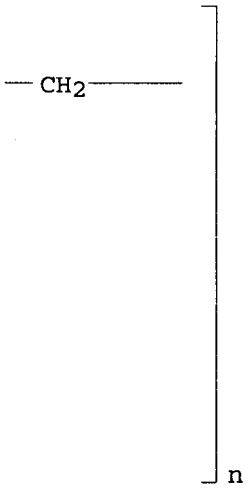
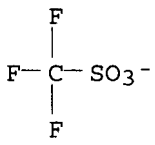


CM 2

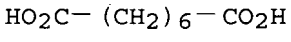
CRN 37181-39-8
CMF C F3 O3 S



RN 186524-47-0 HCAPLUS
CN 1H-Benz[e]indolium, 3-(2-aminoethyl)-2-[5-[3-(2-aminoethyl)-1,3-dihydro-1,1-dimethyl-2H-benz[e]indol-2-ylidene]-1,3-pentadienyl]-1,1-dimethyl-, tetrafluoroborate(1-), polymer with octanedioic acid (9CI) (CA INDEX NAME)

CM 1

CRN 505-48-6
CMF C8 H14 O4



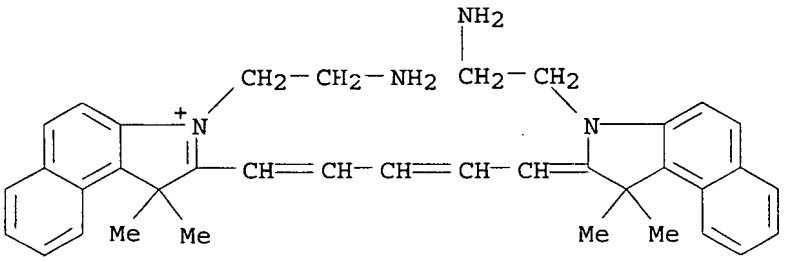
CM 2

CRN 186524-46-9
CMF C37 H41 N4 . B F4

CM 3

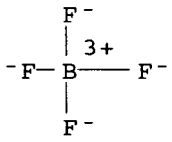
CRN 186524-41-4

CMF C37 H41 N4



CM 4

CRN 14874-70-5
CMF B F4
CCI CCS

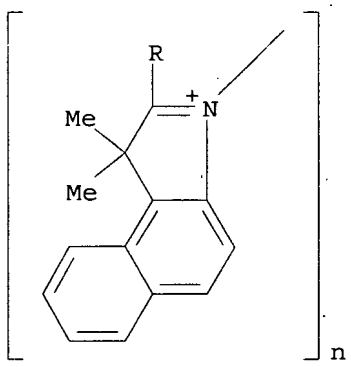


RN 186524-49-2 HCAPLUS
CN Poly[(1,1-dimethyl-1H-benz[e]indolium-3,2-diyl)-1,3-pentadien-1-yl-5-ylidene(1,3-dihydro-1,1-dimethyl-1H-benz[d]indol-3-yl-2-ylidene)-1,2-ethanediylimino(1,8-dioxo-1,8-octanediyl)imino-1,2-ethanediyl tetrafluoroborate(1-)] (9CI) (CA INDEX NAME)

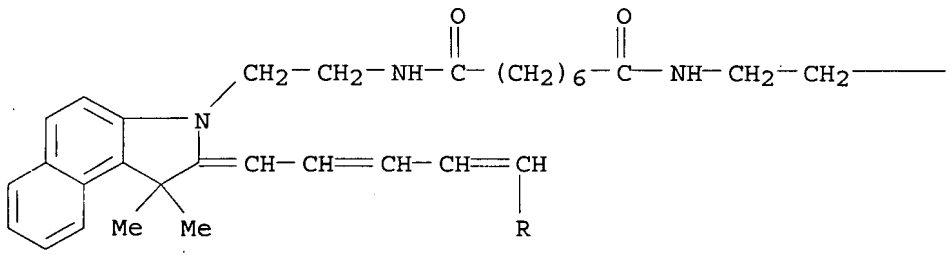
CM 1

CRN 186524-48-1
CMF (C45 H51 N4 O2)n
CCI PMS

PAGE 1-A

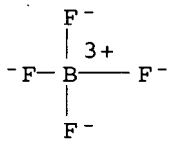


PAGE 2-A



CM 2

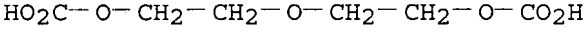
CRN 14874-70-5
CMF B F4
CCI CCS



RN 186524-50-5 HCAPLUS
CN 1H-Benz[e]indolium, 2-[5-[1,3-dihydro-3-(2-hydroxyethyl)-1,1-dimethyl-2H-benz[e]indol-2-ylidene]-1,3-pentadienyl]-3-(2-hydroxyethyl)-1,1-dimethyl-, salt with trifluoromethanesulfonic acid (1:1), polymer with 2-[5-[1,3-dihydro-1-(2-hydroxyethyl)-3,3-dimethyl-2H-indol-2-ylidene]-1,3-pentadienyl]-1-(2-hydroxyethyl)-3,3-dimethyl-3H-indolium salt with trifluoromethanesulfonic acid (1:1), and oxydi-2,1-ethanediyl bis(hydrogen carbonate) (9CI) (CA INDEX NAME)

CM 1

CRN 57557-13-8
CMF C6 H10 O7

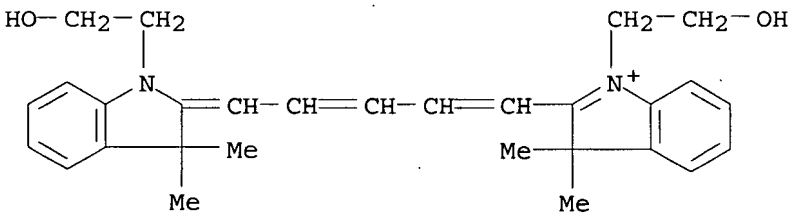


CM 2

CRN 186524-05-0
CMF C29 H35 N2 O2 . C F3 O3 S

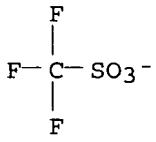
CM 3

CRN 186524-04-9
CMF C29 H35 N2 O2



CM 4

CRN 37181-39-8
CMF C F3 O3 S

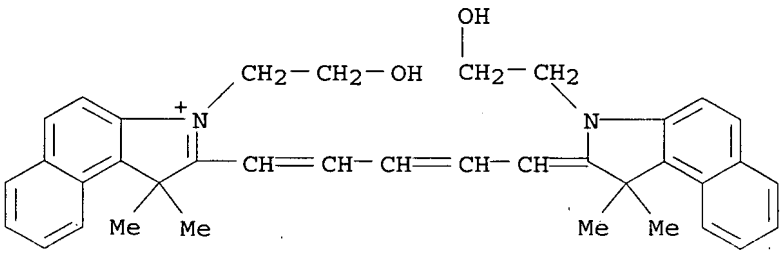


CM 5

CRN 186523-83-1
CMF C37 H39 N2 O2 . C F3 O3 S

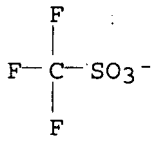
CM 6

CRN 186523-82-0
CMF C37 H39 N2 O2



CM 7

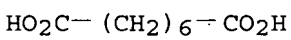
CRN 37181-39-8
CMF C F3 O3 S



RN 186524-51-6 HCAPLUS
CN 1H-Benz[e]indolium, 2-[5-[1,3-dihydro-3-(2-hydroxyethyl)-1,1-dimethyl-2H-benz[e]indol-2-ylidene]-1,3-pentadienyl]-3-(2-hydroxyethyl)-1,1-dimethyl-, salt with trifluoromethanesulfonic acid (1:1), polymer with hexanedioic acid and octanedioic acid (9CI) (CA INDEX NAME)

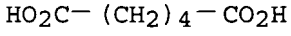
CM 1

CRN 505-48-6
CMF C8 H14 O4



CM 2

CRN 124-04-9
CMF C6 H10 O4

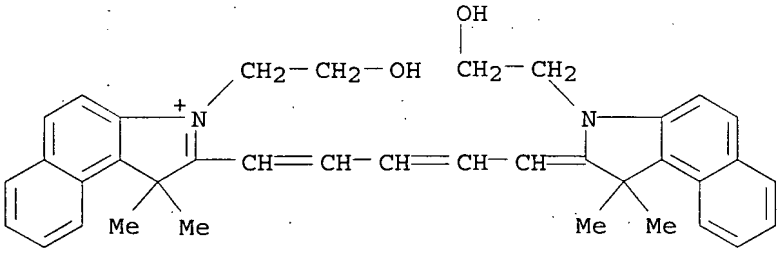


CM 3

CRN 186523-83-1
CMF C37 H39 N2 O2 . C F3 O3 S

CM 4

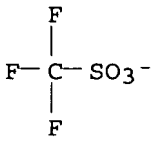
CRN 186523-82-0
CMF C37 H39 N2 O2



CM 5

CRN 37181-39-8

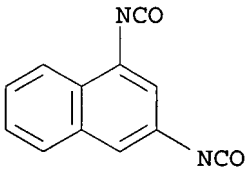
CMF C F3 O3 S



RN 186524-52-7 HCAPLUS
CN 1H-Benz[e]indolium, 2-[5-[1,3-dihydro-3-(2-hydroxyethyl)-1,1-dimethyl-2H-benz[e]indol-2-ylidene]-1,3-pentadienyl]-3-(2-hydroxyethyl)-1,1-dimethyl-, salt with trifluoromethanesulfonic acid (1:1), polymer with 1,3-diisocyanatobenzene and 1,3-diisocyanatonaphthalene (9CI) (CA INDEX NAME)

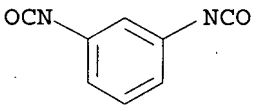
CM 1

CRN 24448-12-2
CMF C12 H6 N2 O2



CM 2

CRN 123-61-5
CMF C8 H4 N2 O2

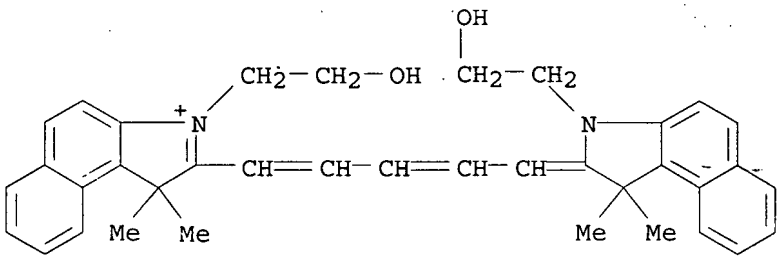


CM 3

CRN 186523-83-1
CMF C37 H39 N2 O2 . C F3 O3 S

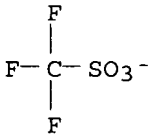
CM 4

CRN 186523-82-0
CMF C37 H39 N2 O2



CM 5

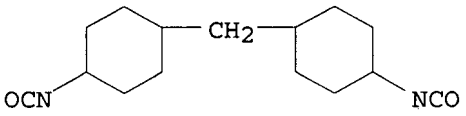
CRN 37181-39-8
CMF C F3 O3 S



RN 186524-53-8 HCAPLUS
CN 1H-Benz[e]indolium, 2-[5-[1,3-dihydro-3-(2-hydroxyethyl)-1,1-dimethyl-2H-benz[e]indol-2-ylidene]-1,3-pentadienyl]-3-(2-hydroxyethyl)-1,1-dimethyl-, salt with trifluoromethanesulfonic acid (1:1), polymer with 1,3-diisocyanatobenzene and 1,1'-methylenebis[4-isocyanatocyclohexane] (9CI) (CA INDEX NAME)

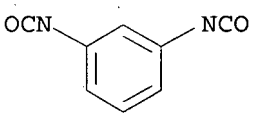
CM 1

CRN 5124-30-1
CMF C15 H22 N2 O2



CM 2

CRN 123-61-5
CMF C8 H4 N2 O2

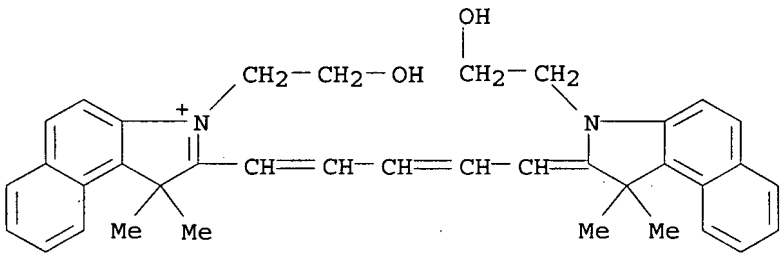


CM 3

CRN 186523-83-1
CMF C37 H39 N2 O2 . C F3 O3 S

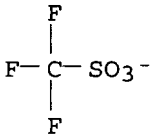
CM 4

CRN 186523-82-0
CMF C37 H39 N2 O2



CM 5

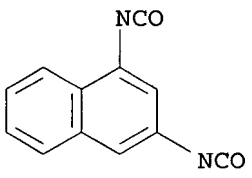
CRN 37181-39-8
CMF C F3 O3 S



RN 186524-56-1 HCAPLUS
CN Naphth[2,1-d]oxazolium, 3-(2-hydroxyethyl)-2-[5-[3-(2-hydroxyethyl)naphth[2,1-d]oxazol-2(3H)-ylidene]-1,3-pentadienyl]-, salt with trifluoromethanesulfonic acid (1:1), polymer with 2-[5-[1,3-dihydro-3-(2-hydroxyethyl)-1,1-dimethyl-2H-benz[e]indol-2-ylidene]-1,3-pentadienyl]-3-(2-hydroxyethyl)-1,1-dimethyl-1H-benz[e]indolium salt with trifluoromethanesulfonic acid (1:1), 1,12-diisocyanatododecane and 1,3-diisocyanatonaphthalene (9CI) (CA INDEX NAME)

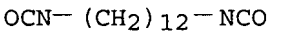
CM 1

CRN 24448-12-2
CMF C12 H6 N2 O2



CM 2

CRN 13879-35-1
CMF C14 H24 N2 O2

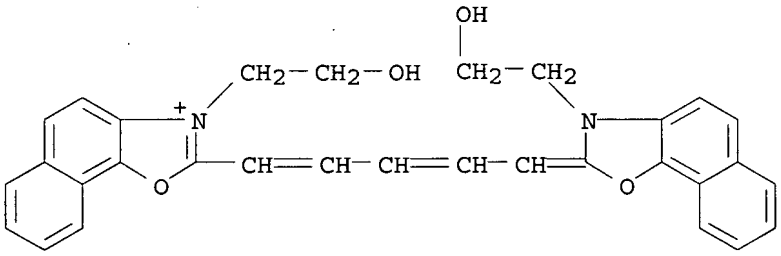


CM 3

CRN 186524-55-0
CMF C31 H27 N2 O4 . C F3 O3 S

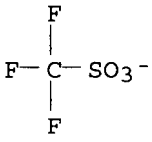
CM 4

CRN 186524-54-9
CMF C31 H27 N2 O4



CM 5

CRN 37181-39-8
CMF C F3 O3 S

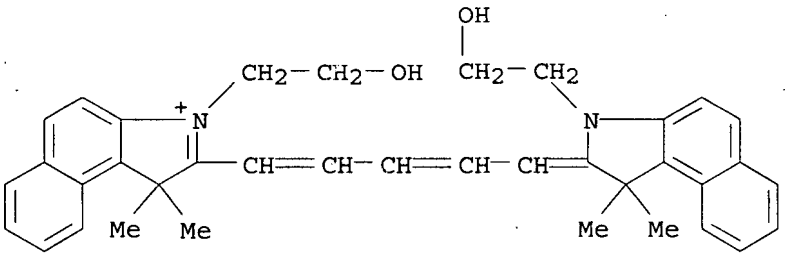


CM 6

CRN 186523-83-1
CMF C37 H39 N2 O2 . C F3 O3 S

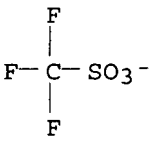
CM 7

CRN 186523-82-0
CMF C37 H39 N2 O2



CM 8

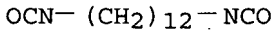
CRN 37181-39-8
CMF C F3 O3 S



RN 186524-57-2 HCAPLUS
CN Naphth[2,1-d]oxazolium, 3-(2-hydroxyethyl)-2-[5-[3-(2-hydroxyethyl)naphth[2,1-d]oxazol-2(3H)-ylidene]-1,3-pentadienyl]-, salt with trifluoromethanesulfonic acid (1:1), polymer with 2-[5-[1,3-dihydro-3-(2-hydroxyethyl)-1,1-dimethyl-2H-benz[e]indol-2-ylidene]-1,3-pentadienyl]-3-(2-hydroxyethyl)-1,1-dimethyl-1H-benz[e]indolium salt with trifluoromethanesulfonic acid (1:1), 1,12-diisocyanatododecane and 2,4-diisocyanato-1-methylenebenzene (9CI) (CA INDEX NAME)

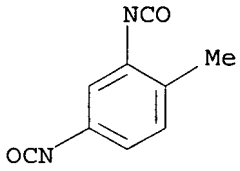
CM 1

CRN 13879-35-1
CMF C14 H24 N2 O2



CM 2

CRN 584-84-9
CMF C9 H6 N2 O2

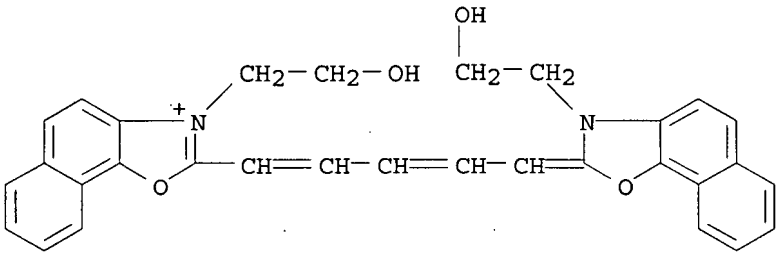


CM 3

CRN 186524-55-0
CMF C31 H27 N2 O4 . C F3 O3 S

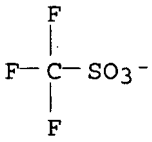
CM 4

CRN 186524-54-9
CMF C31 H27 N2 O4



CM 5

CRN 37181-39-8
CMF C F3 O3 S

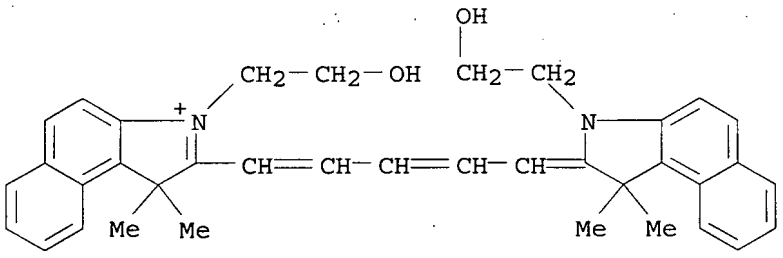


CM 6

CRN 186523-83-1
CMF C37 H39 N2 O2 . C F3 O3 S

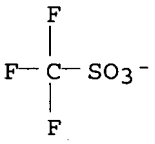
CM 7

CRN 186523-82-0
CMF C37 H39 N2 O2



CM 8

CRN 37181-39-8
CMF C F3 O3 S



IC ICM C09B069-10
ICS G11B007-24
CC 41-11 (Dyes, Organic Pigments, Fluorescent Brighteners, and Photographic Sensitizers)
Section cross-reference(s): 35, 74
IT **Optical recording materials**
(optical recording elements containing polymeric dyes)
IT **186523-84-2P 186523-86-4P 186523-87-5P**
186523-89-7P 186523-90-0P 186523-92-2P
186523-94-4P 186523-95-5P 186523-97-7P
186523-98-8P 186524-00-5P 186524-01-6P
186524-03-8P 186524-06-1P 186524-08-3P
186524-09-4P 186524-11-8P 186524-13-0P
186524-15-2P 186524-18-5P 186524-19-6P
186524-20-9P 186524-22-1P 186524-24-3P
186524-26-5P **186524-27-6P 186524-29-8P**
186524-31-2P 186524-32-3P 186524-35-6P
186524-37-8P 186524-39-0P 186524-40-3P
186524-43-6P 186524-45-8P 186524-47-0P
186524-49-2P 186524-50-5P 186524-51-6P
186524-52-7P 186524-53-8P 186524-56-1P
186524-57-2P 186524-59-4P 186524-61-8P 186524-62-9P
186848-75-9P
(optical recording elements containing polymeric dyes)

L43 ANSWER 13 OF 16 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1997:151478 HCAPLUS
DOCUMENT NUMBER: 126:164325
TITLE: Transition metal formazan complex-cyanine dye copolymers for optical recording layers of compact disks.
INVENTOR(S): Burns, Elizabeth Gertrudede Fr Gb; Goswami, Ramanuj; Kovacs, Csaba Andras
PATENT ASSIGNEE(S): Eastman Kodak Co., USA
SOURCE: Eur. Pat. Appl., 32 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 750019	A2	19961227	EP 1996-201668 <--	19960614
EP 750019	A3	19990421		

EP 750019 B1 20010829
R: DE, FR, GB
JP 09095520 A 19970408 JP 1996-158460 19960619
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PRIORITY APPLN. INFO.: US 1995-291P P 19950619
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US 1996-621287 A 19960322
<--

ED Entered STN: 08 Mar 1997
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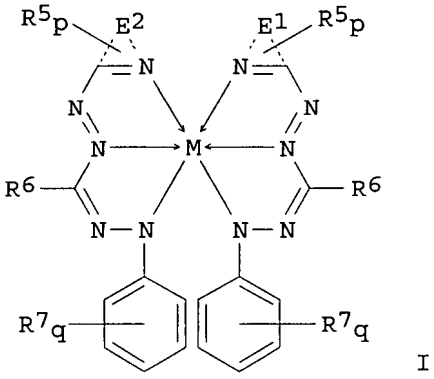

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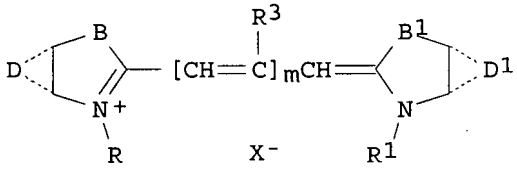


II

AB Optical recording materials are based on copolymers containing 70-100 mol.% of repeating units comprising a transition metal formazan complex radical and a cyanine dye radical. These copolymers show improved light stability and improved adhesion to the other layers of a compact disk structure. The formazan dye radical repeating unit is derived from a structure I (E1, E2 = atoms necessary to complete 5- or 6-membered heterocyclic ring; R5, R7 = H, C1-20 alkyl, C6-10 aryl, aralkyl, heteroalkyl, alkenyl, alkoxy, aryloxy, carbamyl, sulfamoyl, acylamino, sulfonylamino, halogen ureido, hydroxy, carbamoyloxy, nitro, cyano, thiocyano, carboxy; R6 = C1-20 alkyl, heterocycle, aryl, alkoxyphenyl, alkylphenyl, alkenyloxyphenyl, alkoxycarbonylphenyl; M = Ni, Pt, Pd, Zn; p, q = 0-4). Cyanine dye radical repeating unit is derived from II (D,D1 = aromatic or heterocyclic ring; B,B1 = O, S, Se, CH=CH, CMe2, N; B may combine with D or B1 may combine with D1 to form fused ring; R, R1 = C1-10 alkyl, C7-20 alkyl; R3 = H, C1-10 alkyl, C7-20 aralkyl, Cl, Br; X = anionic counterion; m = 1-2).

IT **186775-08-6P 186775-09-7P**
(transition metal formazan complex-cyanine dye copolymers for optical recording layers of compact disks)

RN 186775-08-6 HCAPLUS

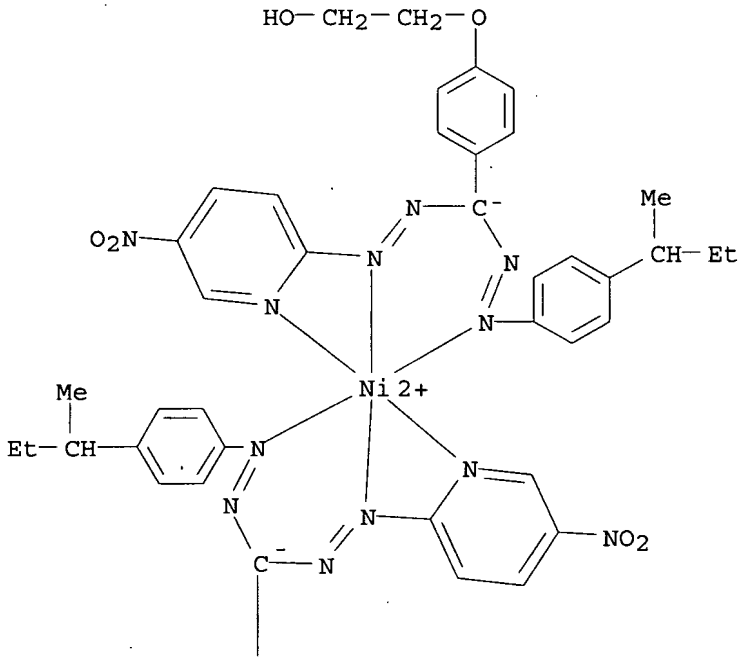
CN 1H-Benz[e]indolium, 2-[5-[1,3-dihydro-3-(2-hydroxyethyl)-1,1-dimethyl-

2H-benz[e]indol-2-ylidene]-1,3-pentadienyl]-3-(2-hydroxyethyl)-1,1-dimethyl-, salt with trifluoromethanesulfonic acid (1:1), polymer with bis[2-[4-[[[4-(2-methylpropyl)phenyl]azo-κN2][(5-nitro-2-pyridinyl-κN)azo-κN2]methyl]phenoxy]ethanolato]nickel and 1,6-diisocyanatohexane (9CI) (CA INDEX NAME)

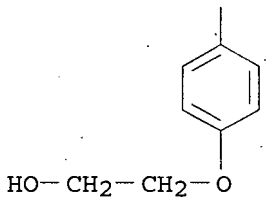
CM 1

CRN 186775-07-5
CMF C48 H50 N12 Ni O8
CCI CCS

PAGE 1-A



PAGE 2-A



CM 2

CRN 822-06-0
CMF C8 H12 N2 O2

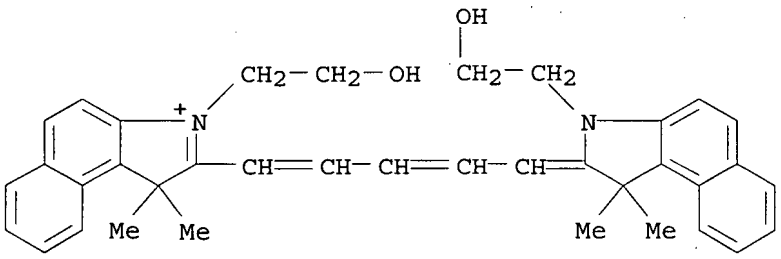
O=C=N—$(CH_2)_6$—N=C=O

CM 3

CRN 186523-83-1
CMF C37 H39 N2 O2 . C F3 O3 S

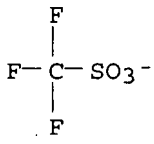
CM 4

CRN 186523-82-0
CMF C37 H39 N2 O2



CM 5

CRN 37181-39-8
CMF C F3 O3 S

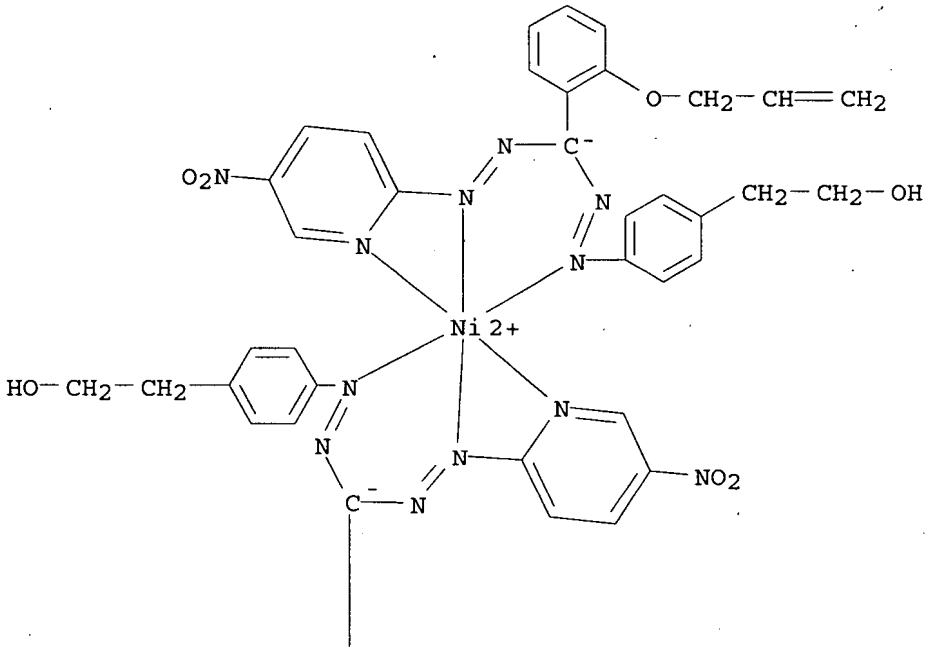


RN 186775-09-7 HCAPLUS
CN 1H-Benz[e]indolium, 2-[5-[1,3-dihydro-3-(2-hydroxyethyl)-1,1-dimethyl-2H-benz[e]indol-2-ylidene]-1,3-pentadienyl]-3-(2-hydroxyethyl)-1,1-dimethyl-, tetrafluoroborate(1-), polymer with bis[4-[[[(5-nitro-2-pyridinyl-κN)azo-κN2][2-(2-propenyloxy)phenyl]methyl]azo-κN1]benzeneethanolato]nickel and 1,6-diisocyanatohexane (9CI) (CA INDEX NAME)

CM 1

CRN 186775-05-3
CMF C46 H42 N12 Ni O8
CCI CCS

PAGE 1-A



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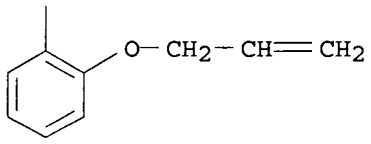


CM 2

CRN 822-06-0
CMF C8 H12 N2 O2

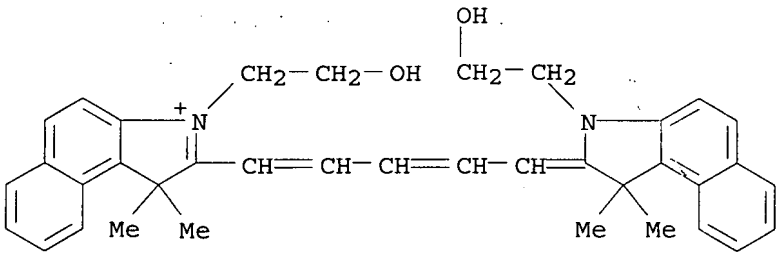
OCN— $(CH_2)_6$ —NCO

CM 3

CRN 186775-06-4
CMF C37 H39 N2 O2 . B F4

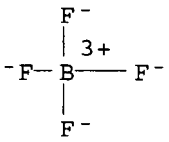
CM 4

CRN 186523-82-0
CMF C37 H39 N2 O2



CM 5

CRN 14874-70-5
CMF B F4
CCI CCS



IT **186775-12-2 186775-13-3 186775-14-4**
(transition metal formazan complex-cyanine dye copolymers for optical recording layers of compact disks)

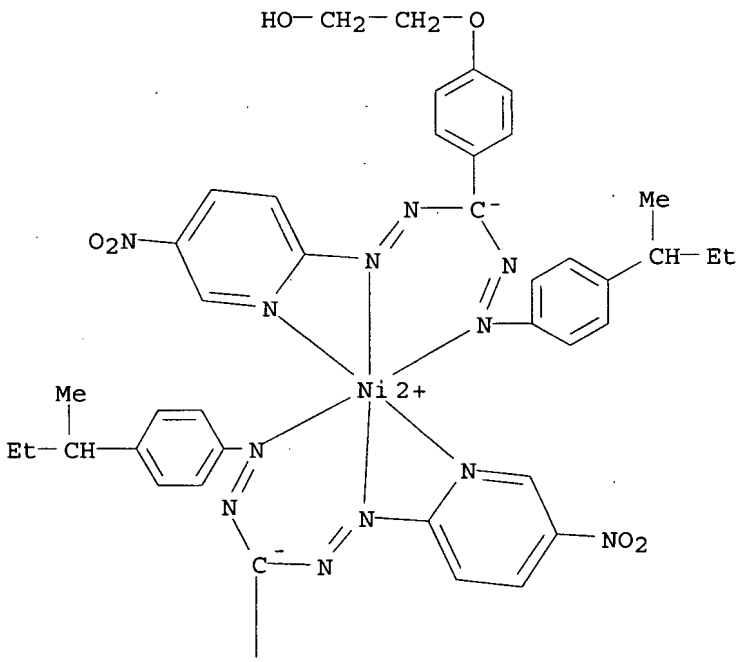
RN 186775-12-2 HCAPLUS

CN 1H-Benz[e]indolium, 2-[5-[1,3-dihydro-3-[(4-hydroxyphenyl)methyl]-1,1-dimethyl-2H-benz[e]indol-2-ylidene]-1,3-pentadienyl]-3-[(4-hydroxyphenyl)methyl]-1,1-dimethyl-, salt with trifluoromethanesulfonic acid (1:1), polymer with bis[2-[4-[[[4-(2-methylpropyl)phenyl]azo-κN2][(5-nitro-2-pyridinyl-κN)azo-κN2]methyl]phenoxy]ethanolato]nickel and 1,4-diisocyanatobutane (9CI) (CA INDEX NAME)

CM 1

CRN 186775-07-5
CMF C48 H50 N12 Ni O8
CCI CCS

PAGE 1-A



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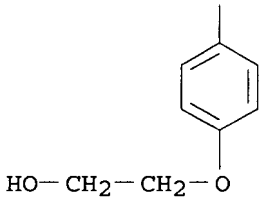


CM 2

CRN 4538-37-8
CMF C6 H8 N2 O2

$OCN-(CH_2)_4-NCO$

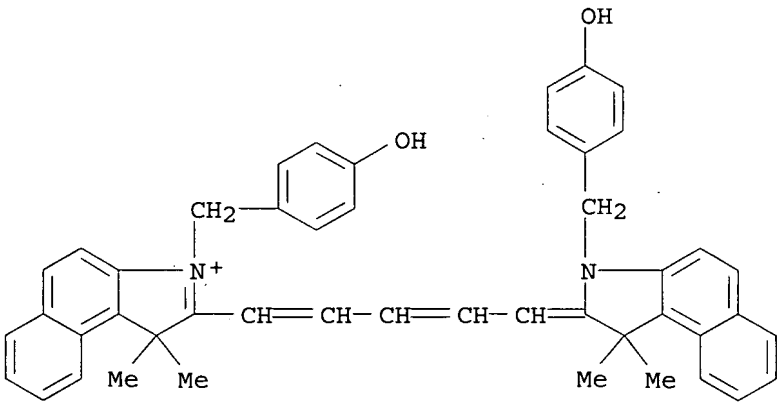
CM 3

CRN 186775-11-1
CMF C47 H43 N2 O2 . C F3 O3 S

CM 4

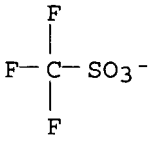
CRN 186775-10-0

CMF C47 H43 N2 O2



CM 5

CRN 37181-39-8
CMF C F3 O3 S

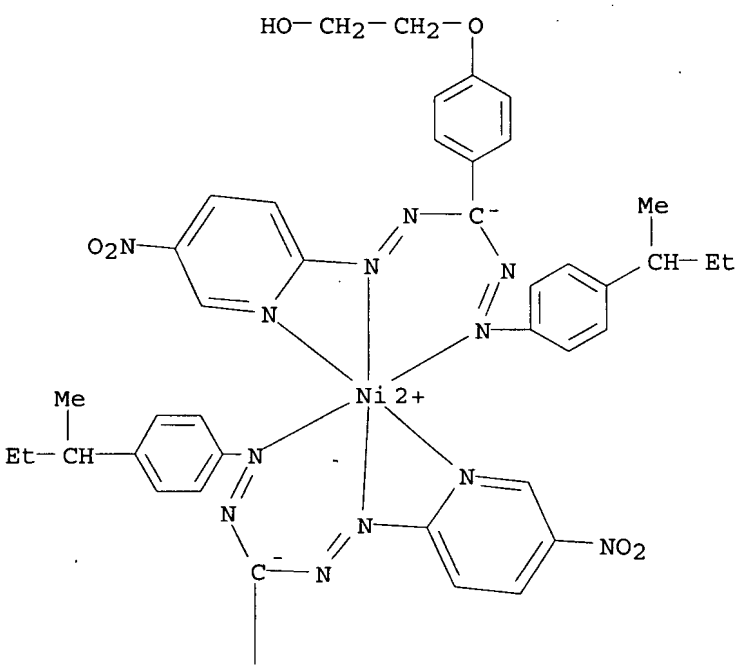


RN 186775-13-3 HCAPLUS
CN 1H-Benz[e]indolium, 2-[5-[1,3-dihydro-3-(2-hydroxyethyl)-1,1-dimethyl-2H-benz[e]indol-2-ylidene]-1,3-pentadienyl]-3-(2-hydroxyethyl)-1,1-dimethyl-, salt with trifluoromethanesulfonic acid (1:1), polymer with bis[2-[4-[[[4-(2-methylpropyl)phenyl]azo-κN2][(5-nitro-2-pyridinyl-κN)azo-κN2]methyl]phenoxy]ethanolato]nickel and 1,4-diisocyanatobutane (9CI) (CA INDEX NAME)

CM 1

CRN 186775-07-5
CMF C48 H50 N12 Ni O8
CCI CCS

PAGE 1-A



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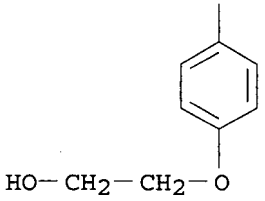


CM 2

CRN 4538-37-8
CMF C6 H8 N2 O2

OCN— $(CH_2)_4$ —NCO

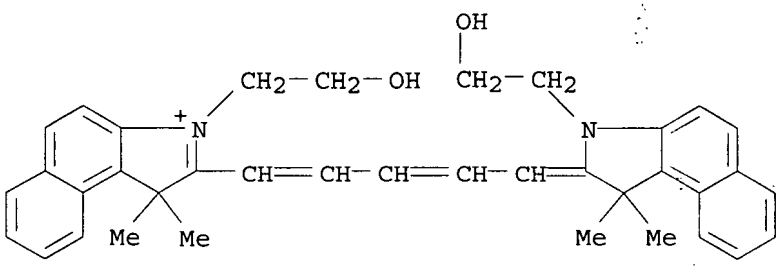
CM 3

CRN 186523-83-1
CMF C37 H39 N2 O2 . C F3 O3 S

CM 4

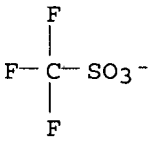
CRN 186523-82-0

CMF C37 H39 N2 O2



CM 5

CRN 37181-39-8
CMF C F3 O3 S

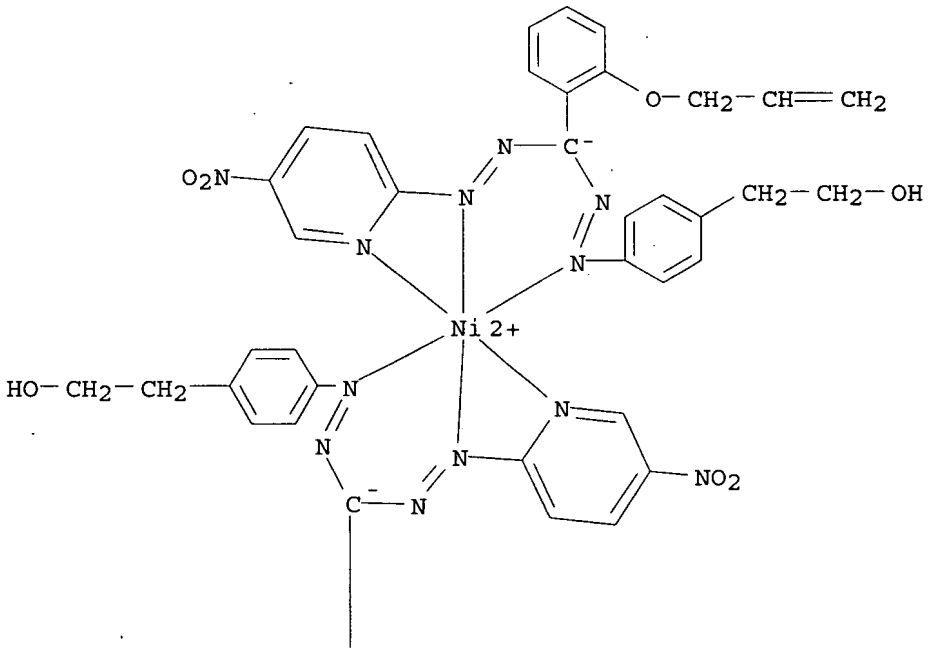


RN 186775-14-4 HCAPLUS
CN 1H-Benz[e]indolium, 2-[5-[1,3-dihydro-3-(2-hydroxyethyl)-1,1-dimethyl-2H-benz[e]indol-2-ylidene]-1,3-pentadienyl]-3-(2-hydroxyethyl)-1,1-dimethyl-, salt with trifluoromethanesulfonic acid (1:1), polymer with bis[4-[[[(5-nitro-2-pyridinyl-κN)azo-κN2][2-(2-propenyloxy)phenyl]methyl]azo-κN1]benzeneethanolato]nickel and 1,4-diisocyanatobutane (9CI) (CA INDEX NAME)

CM 1

CRN 186775-05-3
CMF C46 H42 N12 Ni O8
CCI CCS

PAGE 1-A



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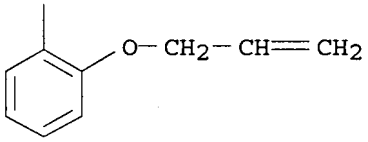


CM 2

CRN 4538-37-8
CMF C6 H8 N2 O2

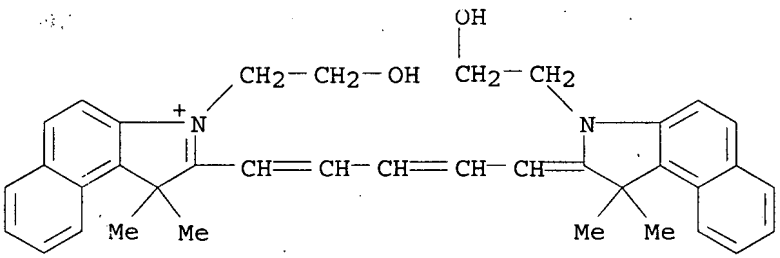
$OCN-(CH_2)_4-NCO$

CM 3

CRN 186523-83-1
CMF C37 H39 N2 O2 . C F3 O3 S

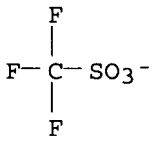
CM 4

CRN 186523-82-0
CMF C37 H39 N2 O2



CM 5

CRN 37181-39-8
CMF C F3 O3 S



IC C09B069-10; G11B007-24
CC 74-12 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
IT **Optical recording materials**
(transition metal formazan complex-cyanine dye copolymers for optical recording layers of compact disks)
IT **186775-08-6P 186775-09-7P**
(transition metal formazan complex-cyanine dye copolymers for optical recording layers of compact disks)
IT **186775-12-2 186775-13-3 186775-14-4**
(transition metal formazan complex-cyanine dye copolymers for optical recording layers of compact disks)

L43 ANSWER 14 OF 16 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1995:594383 HCAPLUS
DOCUMENT NUMBER: 123:145721
TITLE: Tagging thermoplastic materials by incorporation with near-infrared fluorophores
INVENTOR(S): Krutak, James J.; Cushman, Michael R.; Coates, Clarence A.; Parham, William W.; Weaver, Max A.; Patonay, Gabor
PATENT ASSIGNEE(S): Eastman Chemical Co., USA
SOURCE: U.S., 25 pp. Cont.-in-part of U.S. Ser. No. 789,510.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5397819	A	19950314	US 1993-156746	19931124

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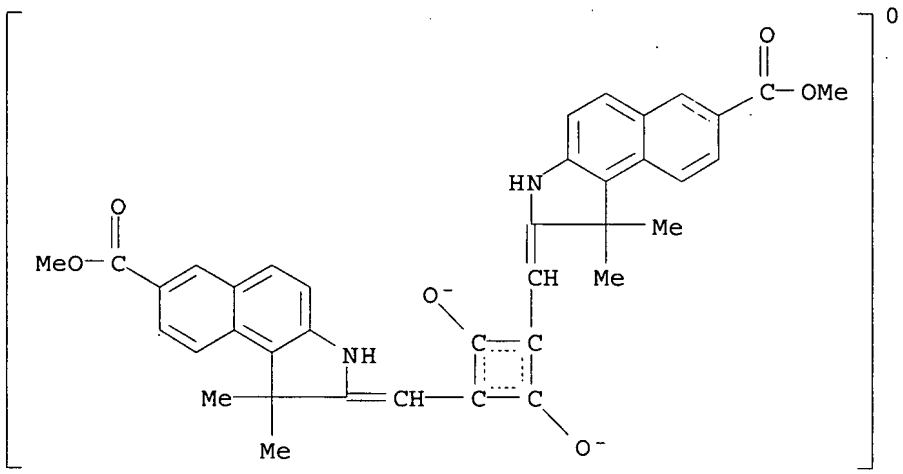
EP 700961	A2	19960313	EP 1995-117613 <--	19921013
EP 700961	A3	19960410		
EP 700961	B1	19981223		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, SE				
AT 146503	T	19970115	AT 1992-921705 <--	19921013
ES 2095494	T3	19970216	ES 1992-921705 <--	19921013
CA 2121507	C	19980616	CA 1992-2121507 <--	19921013
EP 875505	A2	19981104	EP 1998-110896 <--	19921013
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, IE				
AT 174942	T	19990115	AT 1995-117613 <--	19921013
ES 2127455	T3	19990416	ES 1995-117613 <--	19921013
JP 2003176289	A	20030624	JP 2002-338460 <--	19921013
US 5461136	A	19951024	US 1994-265904 <--	19940624
US 5553714	A	19960910	US 1994-339318 <--	19941114
US 5703229	A	19971230	US 1996-609011 <--	19960229

PRIORITY APPLN. INFO.:	US 1991-789570 <--	A2	19911108
	EP 1992-921705 <--	A3	19921013
	EP 1995-117613 <--	A3	19921013
	JP 1993-508427 <--	A3	19921013
	US 1993-156746 <--	A3	19931124
	US 1994-243033 <--	B1	19940516

OTHER SOURCE(S): MARPAT 123:145721
ED Entered STN: 08 Jun 1995
AB The method for tagging thermoplastic containers use near IR fluorescing compds. or copolymd. residues that are readily detected. New compds. useful as near IR fluorophoric markers are prepared The methods and compds. provide a total system useful for marking, for identification purposes, the various classes of thermoplastic wastes, so that they can be identified, sorted, and subsequently recycled.
IT **154587-94-7P 154587-95-8P**
(tagging thermoplastic materials by incorporation with near-IR fluorophores)
RN 154587-94-7 HCAPLUS
CN Cyclobutenediylium, 1,3-bis[[1,3-dihydro-7-(methoxycarbonyl)-1,1-dimethyl-2H-benz[e]indol-2-ylidene]methyl]-2,4-dihydroxy-, bis(inner salt), polymer with 1,4-butanediol and dimethyl 1,4-benzenedicarboxylate (9CI) (CA INDEX NAME)

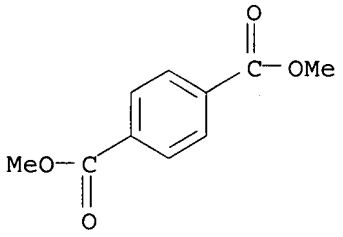
CM 1

CRN 154587-93-6
CMF C38 H32 N2 O6
CCI CCS



CM 2

CRN 120-61-6
CMF C10 H10 O4



CM 3

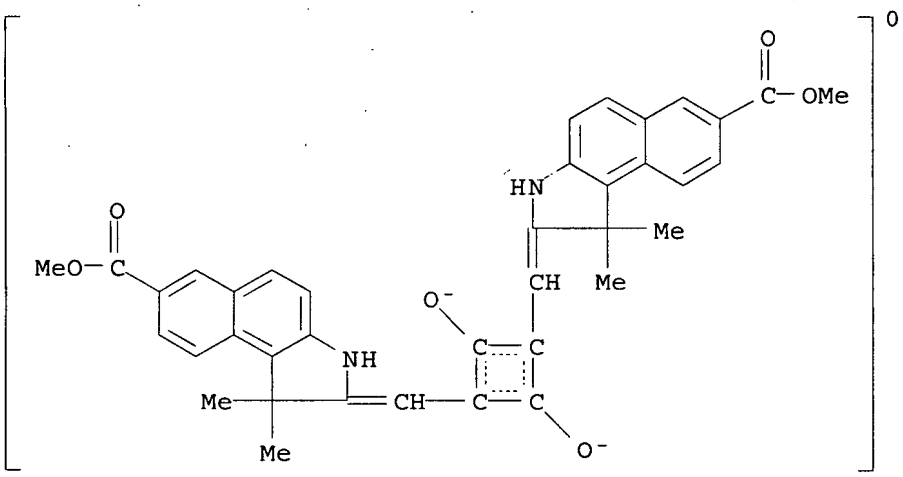
CRN 110-63-4
CMF C4 H10 O2

HO— $(CH_2)_4$ —OH

RN 154587-95-8 HCAPLUS
CN Cyclobutenediylium, 1,3-bis[(1,3-dihydro-7-(methoxycarbonyl)-1,1-dimethyl-2H-benz[e]indol-2-ylidene)methyl]-2,4-dihydroxy-, bis(inner salt), polymer with dimethyl 1,4-benzenedicarboxylate and 2-methyl-1,3-propanediol (9CI) (CA INDEX NAME)

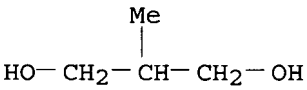
CM 1

CRN 154587-93-6
CMF C38 H32 N2 O6
CCI CCS



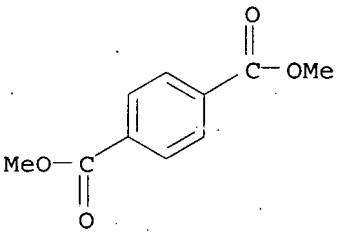
CM 2

CRN 2163-42-0
CMF C4 H10 O2



CM 3

CRN 120-61-6
CMF C10 H10 O4



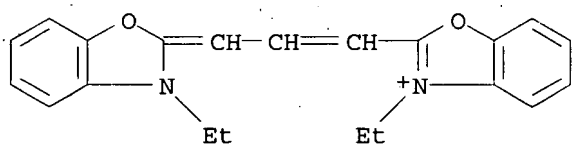
IC ICM C08K005-34
INCL 524088000
CC 37-6 (Plastics Manufacture and Processing)
Section cross-reference(s): 25, 38
IT **Fluorescent substances**
(near IR; tagging thermoplastic materials by incorporation with near-IR fluorophores)
IT 104493-98-3P 154587-93-6P **154587-94-7P**
154587-95-8P 154755-44-9P 154755-45-0P 167093-11-0P
167093-13-2P 167093-14-3P 167093-15-4P 167093-16-5P
167093-18-7P 167093-19-8P 167093-20-1P 167093-21-2P

167093-22-3P 167093-24-5P 167093-25-6P 167093-26-7P
167093-27-8P 167093-28-9P
(tagging thermoplastic materials by incorporation with near-IR fluorophores)

L43 ANSWER 15 OF 16 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1991:617990 HCAPLUS
DOCUMENT NUMBER: 115:217990
TITLE: Novel third order nonlinear optical materials composed of ionic polymers and chromophores
AUTHOR(S): Tomiyama, Hiromitsu; Okada, Shuji; Matsuda, Hiro; Nakanishi, Hachiro
CORPORATE SOURCE: Cent. Res. Lab., Hodogaya Chem. Co., Ltd., Tokyo, 115, Japan
SOURCE: Proceedings of SPIE-The International Society for Optical Engineering (**1990**), 1337(Nonlinear Opt. Prop. Org. Mater. 3), 170-7
CODEN: PSISDG; ISSN: 0277-786X
DOCUMENT TYPE: Journal
LANGUAGE: English
ED Entered STN: 15 Nov 1991
AB The complex composed of ionic polymer and ionic dye was investigated for third order nonlinear optics. The complexes were prepared by ion exchange reaction between sulfonic group of the polymers and cationic dyes. As cationic dyes, hemicyanines (HC-n), where n indicates the number od double bonds between the aromatic rings, oxacyanine (OC-1) and triphenylmethane derivs. were used. The dye content of the complex could be controlled with in the range of 0.1-0.6 molar ratio of bound dyes to the sulfonic groups by the composition of mixed solvents for the reaction. The thin films of complexes were made by spin coating of their CHCl3/MeOH solution on fused quartz plates. They were transparent and homogeneous with naked eyes and polarizing microscope. THG measurements were performed by use of pumping laser light from 1.5 to 2.1 μm. χ(3) Values of every complexes were linearly proportional to the dye content <M>)(mmol/cm3). The X(3) values of hemicyhanine complexes became large at the pumping wavelengths in resonant region of every dyes, and X(3) of HC-2 was always larger than that of HC-1, whereas that of OC-1 with a sym. structure was ten times smaller than that of HC-1. The largest X(3) values attained at each maximum <M> and at the pumping of 1.5 μm were 1.8 + 10-11 esu for HC-1, 2.4 + 10-11 esu for HC-2 and 1.7 + 10-11esu for Crystal Violet. However, in the case of Malachite Green and Basic Cyanine 6GH, their THG intensities were negligibly small even at resonant region.
IT **131825-80-4**
(third-order nonlinear optical properties of)
RN 131825-80-4 HCAPLUS
CN Benzoxazolium, 3-ethyl-2-[3-(3-ethyl-2(3H)-benzoxazolylidene)-1-propenyl]-, iodide, compd. with 2-methyl-2-[(1-oxo-2-propenyl)amino]-1-propanesulfonic acid monosodium salt homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 905-96-4
CMF C21 H21 N2 O2 . I



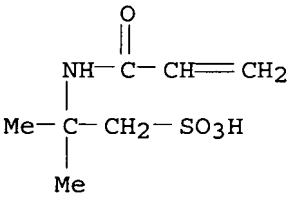
● I^-

CM 2

CRN 35641-59-9
CMF (C7 H13 N O4 S . Na)x
CCI PMS

CM 3

CRN 5165-97-9
CMF C7 H13 N O4 S . Na



● Na

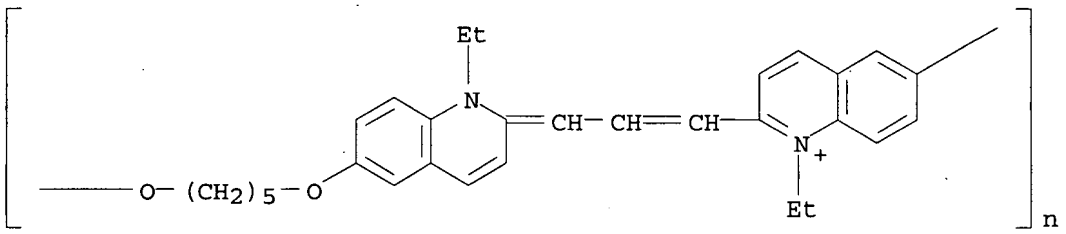
CC 73-10 (Optical, Electron, and Mass Spectroscopy and Other Related Properties)
Section cross-reference(s): 36

IT **Optical materials**
(nonlinear, third order, composed of ionic polymers and chromophores)

IT 131825-77-9 131825-79-1 **131825-80-4** 131825-82-6
131825-83-7 131825-86-0 131825-87-1 131853-96-8 131895-95-9
133945-35-4
(third-order nonlinear optical properties of)

L43 ANSWER 16 OF 16 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1991:493081 HCAPLUS
DOCUMENT NUMBER: 115:93081
TITLE: Oligomers containing carbocyanine/flexible chain segments as nonlinear optical materials
AUTHOR(S): Yu, Luping; Chen, Mai; Dalton, Larry R.
CORPORATE SOURCE: Dep. Chem., Univ. South. California, Los Angeles, CA, 90089-1062, USA
SOURCE: Polymer (**1991**), 32(8), 1369-75
CODEN: POLMAG; ISSN: 0032-3861
DOCUMENT TYPE: Journal

LANGUAGE: English
ED Entered STN: 06 Sep 1991
AB Oligomers containing carbocyanine units linked by flexible chain segments were prepared The oligomers were cast into films and had improved miscibility with other host polymer matrixes compared to the simple carbocyanine mols. Degenerate 4-wave mixing (DFWM) measurements showed that a pure oligomer film had high optical nonlinearity, $\chi(3)/\alpha$ = 9.0 + 10-13 esu·cm at λ = 532 nm. The reaction of acidic protons in a quinolidine quaternary salt with di-Et squarate was utilized to synthesize a polymer. The polymer containing 13 repeat units, had a diffuse and strong absorption in the visible region and did not exhibit a detectable DFWM signal at 532 or 1064 nm.
IT **135072-99-0P**
(oligomeric, preparation and nonlinear optical properties of)
RN 135072-99-0 HCAPLUS
CN Poly[(1-ethylquinolinium-6,2-diyl)-1-propen-1-yl-3-ylidene(1-ethyl-6-quinolinyl-2(1H)-ylidene)oxy-1,5-pentanediyloxy iodide] (9CI) (CA INDEX NAME)



● I^-

CC 35-5 (Chemistry of Synthetic High Polymers)
Section cross-reference(s): 36
IT **Optical materials**
(nonlinear, carbocyanine-containing oligomers, preparation and characterization of)
IT 132271-82-0P **135072-99-0P**
(oligomeric, preparation and nonlinear optical properties of)

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=> d que 142
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                 139361-79-8/BI OR 183745-01-9/BI OR 197087-00-6/BI OR
                 259133-57-8/BI OR 442548-17-6/BI OR 442548-19-8/BI OR
                 869557-67-5/BI)
L3               SCR 2043
L5               SCR 1841 AND 1993 AND 2040
L9               STR

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 Ak~G2~Ak
@11 12 @13


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REP G2=(1-10) 14
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GGCAT    IS UNS  AT   6
GGCAT    IS UNS  AT   7
GGCAT    IS UNS  AT   9
GGCAT    IS UNS  AT  10
GGCAT    IS UNS  AT  11
GGCAT    IS UNS  AT  13
DEFAULT ECLEVEL IS LIMITED
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GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS  14

STEREO ATTRIBUTES: NONE
L12          164 SEA FILE=REGISTRY SSS FUL L9 AND L3 AND L5
L17              SCR 1993 AND 2040
L22              STR

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 1      2      3        @4   5   @6


VAR G1=10/4-1 6-3
NODE ATTRIBUTES:
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DEFAULT ECLEVEL IS LIMITED
ECOUNT   IS M1 N  M0-X1 O  M0-X1 S  M0-X1 Se  AT   1
ECOUNT   IS M1 N  M0-X1 O  M0-X1 S  M0-X1 Se  AT   3
ECOUNT   IS M5 C  AT  10

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
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NUMBER OF NODES IS 7

STEREO ATTRIBUTES: NONE

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L29         259 SEA FILE=REGISTRY ABB=ON  PLU=ON  L12 OR L25
L30          96 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L29
L31          58 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L2
L32         154 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L30 OR L31
L40         134 SEA FILE=HCAPLUS ABB=ON  PLU=ON  MITSUMOTO, T?/AU
L41        2095 SEA FILE=HCAPLUS ABB=ON  PLU=ON  NAKAMURA, I?/AU
L42           6 SEA FILE=HCAPLUS ABB=ON  PLU=ON  (L40 OR L41) AND L32
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=> d l42 1-6 ibib ed abs fhitstr hitind

L42 ANSWER 1 OF 6 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2005:1277470 HCAPLUS
DOCUMENT NUMBER: 143:485862
TITLE: Lithographic printing method and presensitized plate
INVENTOR(S): **Mitsumoto, Tomoyoshi; Nakamura, Ippei**
PATENT ASSIGNEE(S): Japan
SOURCE: U.S. Pat. Appl. Publ., 38 pp.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
US 2004197701	A1	20041007	US 2004-809323		20040326
JP 2004306582	A	20041104	JP 2003-327659		20030919
JP 2005103968	A	20050421	JP 2003-341197		20030930
EP 1464486	A2	20041006	EP 2004-7456		20040326
EP 1464486	A3	20050810			
CN 1597313	A	20050323	CN 2004-10079734		20040917
PRIORITY APPLN. INFO.:			JP 2003-85166	A	20030326
			JP 2003-327659	A	20030919
			JP 2003-341197	A	20030930

OTHER SOURCE(S): MARPAT 143:485862
ED Entered STN: 06 Dec 2005
AB Disclosed is a presensitized plate composed of a support having thereon an image recording layer which includes: an IR absorber (A) that is a cyanine dye having at least one fused ring composed of a nitrogen-contain- ing heterocycle in combination with an aromatic ring or a second heterocycle, and having on the aromatic ring or second heterocycle an electron-withdrawing group or a heavy atom-containing group, a radical generator (B), and a radical-polymerizable compound (C), and which is removable with printing ink and/or damp- ening water. The presensitized of the present invention can be imaged with an IR light-emitting laser to directly record an image from digital data on a computer or the like and is then subjected to on-machine development without carrying out a development step, which is capable of providing a large number of good impressions with a practical amount of energy.

IT **110992-87-5**
(IR absorber; lithog. printing method and presensitized plate containing)
RN 110992-87-5 HCAPLUS
CN 3H-Indolium, 5-chloro-2-[2-[3-[(5-chloro-1,3-dihydro-1,3,3-trimethyl-2H-indol-2-ylidene)ethylidene]-2-(diphenylamino)-1-cyclopenten-1-yl]ethenyl]-1,3,3-trimethyl-, tetrafluoroborate(1-) (9CI) (CA INDEX NAME)

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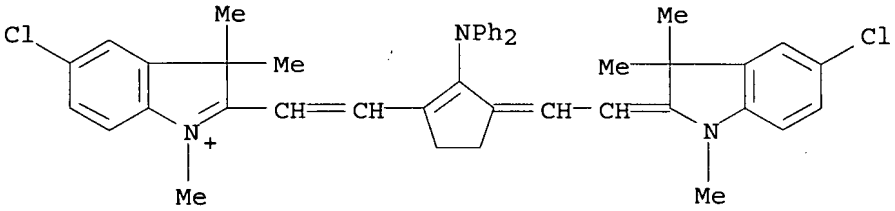
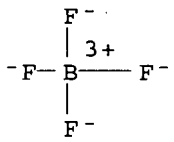
CRN 110992-86-4
CMF C43 H42 Cl2 N3



CM 2

CRN 14874-70-5
CMF B F4
CCI CCS



IC ICM G03C001-76
INCL 430270100; 430197000
CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
IT **110992-87-5 139361-79-8 183745-01-9 197087-00-6 259133-57-8 442548-17-6 442548-19-8 869557-67-5**
(IR absorber; lithog. printing method and presensitized plate containing)

L42 ANSWER 2 OF 6 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2004:632374 HCAPLUS
DOCUMENT NUMBER: 141:164864
TITLE: Positive-working presensitized lithographic plates for direct heat-mode IR laser platemaking
INVENTOR(S): **Nakamura, Ippei**
PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 39 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent

LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2004219650	A	20040805	JP 2003-6093	20030114
US 2004157152	A1	20040812	US 2004-754511	20040112
PRIORITY APPLN. INFO.:			JP 2003-6093 A	20030114

ED Entered STN: 06 Aug 2004

AB The lithog. plate comprises, successively from the bottom, a support, first layer mainly containing alkali-soluble polymers, and second layer mainly containing alkali-soluble polymers different from those in the first layer, wherein mixts. of ≥2 kinds of IR-absorbing agents are included in either or both the first and second layer. Preferably, one IR-absorbing agents and another IR-absorbing agents show maximum absorption at ≥825 nm, and <825 nm, resp. The plate shows high sensitivity independent of exposure wavelength, and wide development latitude.

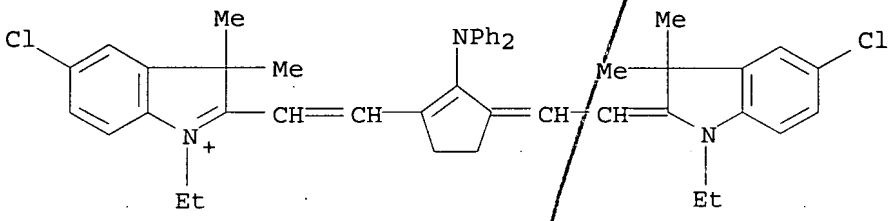
IT **442548-17-6**
(IR-absorbing dyes; in pos.-working presensitized lithog. plates containing photoimaging layers containing polymethyne dyes for direct heat-mode IR laser platemaking)

RN 442548-17-6 HCAPLUS

CN 3H-Indolium, 5-chloro-2-[2-[3-[(5-chloro-1-ethyl-1,3-dihydro-3,3-dimethyl-2H-indol-2-ylidene)ethylidene]-2-(diphenylamino)-1-cyclopenten-1-yl]ethenyl]-1-ethyl-3,3-dimethyl-, salt with trifluoromethanesulfonic acid (1:1) (9CI) (CA INDEX NAME)

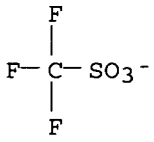
CM 1

CRN 162717-38-6
CMF C45 H46 Cl2 N3



CM 2

CRN 37181-39-8
CMF C F3 O3 S



IC ICM G03F007-004
ICS G03F007-00; G03F007-095; G03F007-11
CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
IT 56289-67-9 69415-30-1 106897-67-0 134127-48-3 162411-29-2
162717-39-7 201024-57-9 205744-92-9 212964-63-1 244606-76-6
303965-99-3 335384-21-9 **442548-17-6** 728043-82-1
728043-83-2 728043-84-3 728043-86-5 728043-87-6
(IR-absorbing dyes; in pos.-working presensitized lithog. plates containing photoimaging layers containing polymethyne dyes for direct heat-mode IR laser platemaking)

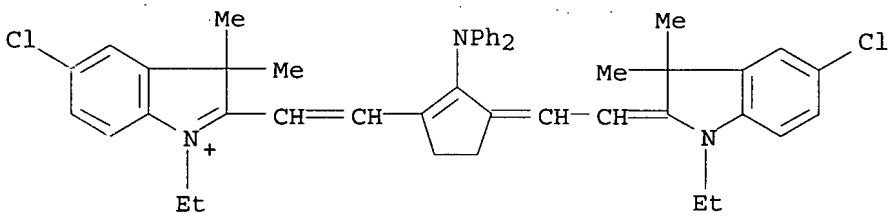
L42 ANSWER 3 OF 6 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2004:307718 HCAPLUS
DOCUMENT NUMBER: 140:347550
TITLE: Infrared laser-sensitive lithographic plate
INVENTOR(S): **Nakamura, Ippei**; Iwato, Kaoru; Sakata, Itaru
PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 41 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2004117547	A	20040415	JP 2002-277667	20020924
PRIORITY APPLN. INFO.:			JP 2002-277667	20020924

OTHER SOURCE(S): MARPAT 140:347550
ED Entered STN: 15 Apr 2004
AB The material comprises a support successively having thereon (1) first layer mainly containing an alkali soluble resin and (2) second layer containing an alkali-soluble resin different from that in the first layer and a polymethine dye with an amino group substituted on a polymethine chain. It shows high sensitivity and improved development latitude.
IT **442548-17-6**
(IR absorbing dye; presensitized lithog. plate with alkali-soluble resin layer and polymethine dye-containing layer)
RN 442548-17-6 HCAPLUS
CN 3H-Indolium, 5-chloro-2-[2-[3-[(5-chloro-1-ethyl-1,3-dihydro-3,3-dimethyl-2H-indol-2-ylidene)ethylidene]-2-(diphenylamino)-1-cyclopenten-1-yl]ethenyl]-1-ethyl-3,3-dimethyl-, salt with trifluoromethanesulfonic acid (1:1) (9CI) (CA INDEX NAME)

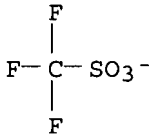
CM 1

CRN 162717-38-6
CMF C45 H46 Cl2 N3



CM 2

CRN 37181-39-8
CMF C F3 O3 S



IC ICM G03F007-004
ICS G03F007-00; G03F007-11
CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
Section cross-reference(s): 41
IT 26529-10-2 54849-63-7 155081-50-8 177167-90-7 177167-98-5
213621-38-6 401903-29-5 **442548-17-6** 680195-45-3
680195-46-4 680195-47-5 680195-49-7 680195-51-1 680195-52-2
(IR absorbing dye; presensitized lithog. plate with alkali-soluble resin layer and polymethine dye-containing layer)

L42 ANSWER 4 OF 6 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2002:538139 HCAPLUS
DOCUMENT NUMBER: 137:95168
TITLE: Negative image-recording materials and cyanine dyes therefor
INVENTOR(S): **Nakamura, Ippei**; Sorori, Tadahiro
PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan
SOURCE: Eur. Pat. Appl., 55 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1223196	A2	20020717	EP 2002-267	20020115
EP 1223196	A3	20030226		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
JP 2002278057	A	20020927	JP 2001-237840	20010806
CN 1372166	A	20021002	CN 2002-105262	20020115
US 2003022094	A1	20030130	US 2002-44959	20020115
US 6797449	B2	20040928		

PRIORITY APPLN. INFO.: JP 2001-6326 A 20010115

JP 2001-237840 A 20010806

OTHER SOURCE(S): MARPAT 137:95168

ED Entered STN: 19 Jul 2002

AB The invention provides a neg. image-recording material for heat-mode exposure systems, which comprises (A) an IR-absorbing cyanine dye having an electron-withdrawing group or a heavy atom-containing substituent in at least one terminal aromatic ring, (B) a radical generator, and (C) a radically polymerizable compound, and which is imagewise exposed to IR rays for image formation thereon. The invention is applicable to the production of planog. printing plates capable of generating a large number of prints. In an example, an IR-absorbing cyanine dye was prepared from 5-chloro-1-ethyl-2,3,3-trimethyl-3H-indolium iodide and N-[2,5-bis[(phenylamino)methylene]cyclopentylidene]-N-phenylbenzenaminium tetrafluoroborate (2:1). The dye was used in conjunction with dipentaerythritol hexaacrylate and allyl methacrylate-methacrylic acid copolymer in addition to a diaryliodonium tosylate radical generator for production of planog. printing plates.

IT **442548-19-8**
(IR-absorbing cyanine dyes for neg. image-recording materials)

RN 442548-19-8 HCAPLUS

CN 3H-Indolium, 2-[2-[2-(diphenylamino)-3-[(1-ethyl-1,3-dihydro-5-iodo-3,3-dimethyl-2H-indol-2-ylidene)ethylidene]-1-cyclopenten-1-yl]ethenyl]-1-ethyl-5-iodo-3,3-dimethyl-, perchlorate (9CI) (CA INDEX NAME)

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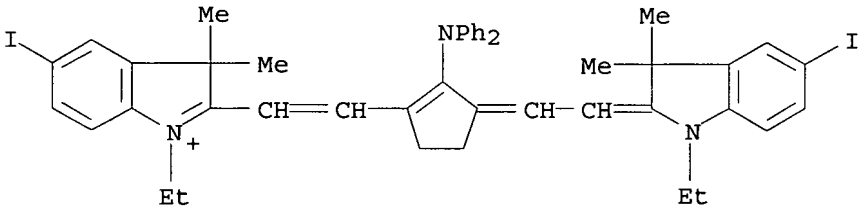
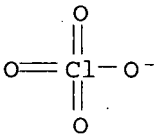
CRN 442548-18-7
CMF C45 H46 I2 N3



CM 2

CRN 14797-73-0
CMF Cl O4



IC ICM C09B023-00
ICS G03F007-004; B41C001-10; C07D209-10

CC 41-11 (Dyes, Organic Pigments, Fluorescent Brighteners, and Photographic Sensitizers)
Section cross-reference(s): 74
IT 110992-90-0 **442548-19-8** 442548-21-2
(IR-absorbing cyanine dyes for neg. image-recording materials)
IT **442548-17-6P**
(dye; IR-absorbing cyanine dyes for neg. image-recording materials)

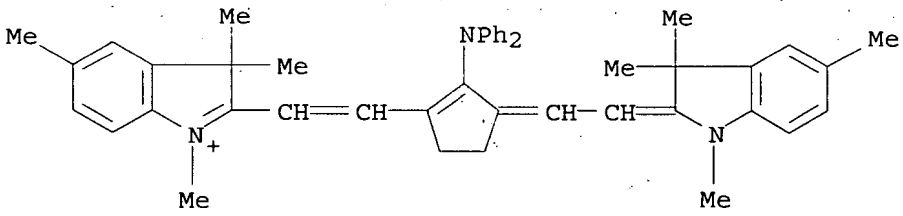
L42 ANSWER 5 OF 6 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2002:183769 HCAPLUS
DOCUMENT NUMBER: 136:239108
TITLE: Negative image-recording material
INVENTOR(S): **Nakamura, Ippei**; Sorori, Tadahiro
PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan
SOURCE: Eur. Pat. Appl., 36 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1186407	A1	20020313	EP 2001-120729	20010905
EP 1186407	B1	20061227		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, CY, TR				
JP 2002082429	A	20020322	JP 2000-273429	20000908
US 2002051934	A1	20020502	US 2001-928447	20010814
US 6733948	B2	20040511		
AT ~~349321~~	T	20070115	AT 2001-120729	20010905
PRIORITY APPLN. INFO.:			JP 2000-273429 A	20000908

ED Entered STN: 15 Mar 2002
AB This invention disclosed a neg. image-recording material which can be imagewise exposed to IR radiation from IR lasers and ensures direct image formation from digital data of a computer or the like. The material, when used in a lithog. printing plate, ensures good hardenability in an. image area and exhibits good printing durability, even when not heated for image formation, and ensures a large number of good prints from the printing plate. The recording material contains (A) an IR absorber, (B) a radical generator having an onium salt structure, (C) a radical-polymerizing compound, and (D) a reducing additive.
IT **197087-00-6**
(IR absorber in neg. image-recording material)
RN 197087-00-6 HCAPLUS
CN 3H-Indolium, 2-[2-[3-[(1,3-dihydro-1,3,3,5-tetramethyl-2H-indol-2-ylidene)ethylidene]-2-(diphenylamino)-1-cyclopenten-1-yl]ethenyl]-1,3,3,5-tetramethyl-, perchlorate (9CI) (CA INDEX NAME)

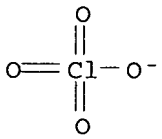
CM 1

CRN 183745-00-8
CMF C45 H48 N3



CM 2

CRN 14797-73-0
CMF Cl O4



IC ICM B41C001-10
ICS B41M005-36
CC 74-5 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
IT 134127-48-3 **197087-00-6**
(IR absorber in neg. image-recording material)
REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L42 ANSWER 6 OF 6 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2002:101172 HCAPLUS
DOCUMENT NUMBER: 136:158877
TITLE: Heat-mode negative-working image-recording material and methods of forming image
INVENTOR(S): **Nakamura, Ippei**; Sorori, Tadahiro
PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 28 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2002040638	A	20020206	JP 2000-224031	20000725
US 2002045128	A1	20020418	US 2001-899123	20010706
US 6770422	B2	20040803		
CN 1334490	A	20020206	CN 2001-120322	20010724
EP 1176007	A2	20020130	EP 2001-117666	20010725
EP 1176007	A3	20040317		
EP 1176007	B1	20070307		

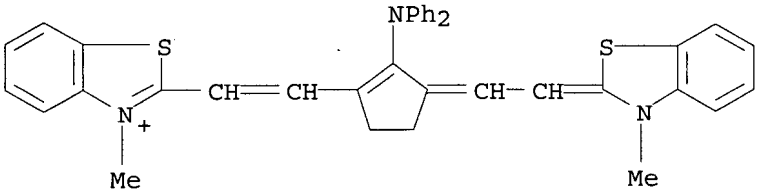
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR

AT 355967 T 20070315 AT 2001-117666 20010725
PRIORITY APPLN. INFO.: JP 2000-224031 A 20000725

ED Entered STN: 06 Feb 2002
AB The invention relates to a heat-mode neg.-working image-recording material which can be directly recorded using an IR laser in a manufacture of a lithog. printing plate. The heat-mode neg.-working image-recording material such as a lithog. printing plate comprises (1) an IR absorber having an oxidation potential 0.45V (vs. SCE), (2) a thermal radical generator such as an onium salt, and (3) a radically polymerizable compound The process involving the development of above recording material by an alkaline solution having $10.5 \leq pH \leq 12.5$ is also claimed.
IT **139361-79-8**
(IR absorber; heat-mode neg.-working image-recording material from)
RN 139361-79-8 HCAPLUS
CN Benzothiazolium, 2-[2-[2-(diphenylamino)-3-[(3-methyl-2(3H)-benzothiazolylidene)ethylidene]-1-cyclopenten-1-yl]ethenyl]-3-methyl-, perchlorate (9CI) (CA INDEX NAME)

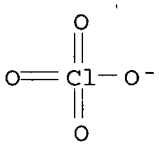
CM 1

CRN 139361-78-7
CMF C37 H32 N3 S2



CM 2

CRN 14797-73-0
CMF Cl O4



IC ICM G03F007-004
ICS B41N001-14; G03F007-00; G03F007-027; G03F007-029; G03F007-32
CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
IT **139361-79-8 183745-01-9 197087-00-6**
259133-57-8 394211-02-0
(IR absorber; heat-mode neg.-working image-recording material from)

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     (FILE 'HOME' ENTERED AT 08:15:43 ON 12 APR 2007)

     FILE 'HCAPLUS' ENTERED AT 08:15:52 ON 12 APR 2007
L1             1 SEA ABB=ON  PLU=ON  US20040197701/PN
                 SEL RN

     FILE 'REGISTRY' ENTERED AT 08:16:09 ON 12 APR 2007
L2             8 SEA ABB=ON  PLU=ON  (110992-87-5/BI OR 139361-79-8/BI OR
                 183745-01-9/BI OR 197087-00-6/BI OR 259133-57-8/BI OR
                 442548-17-6/BI OR 442548-19-8/BI OR 869557-67-5/BI)
                 ACT LEE323/A
L3               SCR 2043
L4               STR
L5               SCR 1841 AND 1993 AND 2040
L6             9 SEA SSS SAM L4 AND L3 AND L5
L7               STR L4
L8             2 SEA SSS SAM L4
L9               STR L7
L10            2 SEA SSS SAM L9
L11           10 SEA SSS SAM L9 AND L3 AND L5
L12          164 SEA SSS FUL L9 AND L3 AND L5
                 SAV L12 LEE323A/A
L13            0 SEA ABB=ON  PLU=ON  L12 AND L2
L14              STR L9
L15            8 SEA SSS SAM L14
L16           22 SEA SSS SAM L14 AND L3 AND L5
L17              SCR 1993 AND 2040
L18           10 SEA SSS SAM L9 AND L3 AND L17
L19              STR L7
L20            6 SEA SSS SAM L19
L21           16 SEA SSS SAM L19 AND L3
L22              STR L19
L23            1 SEA SSS SAM L22 AND L3
L24            9 SEA SSS SAM L22 AND L3 AND L17
L25          210 SEA SSS FUL L22 AND L3 AND L17
L26           35 SEA SSS SAM L9 AND L17
L27           50 SEA SSS SAM L9 AND L5
L28          115 SEA ABB=ON  PLU=ON  L12 AND L25
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L31           58 SEA ABB=ON  PLU=ON  L2
L32          154 SEA ABB=ON  PLU=ON  L30 OR L31
L33          135 SEA ABB=ON  PLU=ON  L32 AND (1840-2003)/PRY,AY,PY
                 E LITHOGRAPHIC PLATES/CT
L34        12620 SEA ABB=ON  PLU=ON  "LITHOGRAPHIC PLATES"+PFT,NT/CT
                 E  IR MATERIALS/CT
L35         1806 SEA ABB=ON  PLU=ON  "IR MATERIALS"+PFT,NT/CT
                 E OPTICAL MATERIALS/CT
L36       175232 SEA ABB=ON  PLU=ON  "OPTICAL MATERIALS"+PFT,NT/CT
L37           47 SEA ABB=ON  PLU=ON  L33 AND (L34 OR L35 OR L36)
L38           16 SEA ABB=ON  PLU=ON  L37 NOT L31
L39           49 SEA ABB=ON  PLU=ON  L31 AND  (1840-2003)/PRY,AY,PY
L40          134 SEA ABB=ON  PLU=ON  MITSUMOTO, T?/AU
L41         2095 SEA ABB=ON  PLU=ON  NAKAMURA, I?/AU
L42            6 SEA ABB=ON  PLU=ON  (L40 OR L41) AND L32
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L43 16 SEA ABB=ON PLU=ON L38 NOT L42
L44 43 SEA ABB=ON PLU=ON L39 NOT L42